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The Republic of Turkey

Turkey

THE STATE PLANNING ORGANIZATION

DRAFT PROGRAM FOR 1962

FOR TRANSITION INTO THE PLAN - PERIOD

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INTRODUCTION

Since its establishment, the State Planning Organization has completed its organizational work, prepared a report on the 1961 national budget, started preliminary work on the long-term plan, studied the important problems connected with the tasks assigned to it by the government, and submitted these studies to the authorities concerned.

In the course of the plan's preparatory work, the Organization published the " Objectives and the Strategy of the Plan " which outlined its aims and set forth the methods to be employed in achieving these aims. The " Strategy " has been accepted after scrutiny by the High Planning Council and the Council of Ministers. It appeared in the Official Gazette of July 5th, 1961. Principles set down in the " Strategy " provide the over-all context of the Organization's activities and surveys.

" Planning " programs the use of existing resources in a rational manner to reach determined goals. But merely making decisions will not solve problems. An administration that commits itself to act according to a plan should be properly equipped to implement these decisions effectively. All countries which have embarked upon planned development have felt the same need to reform their administrative machinery. Therefore, initial plans usually contain the basic administrative reforms which are essential to implement a comprehensive scheme of development. The experience of the past year indicates that Turkey's public sector suffers from disorganization which leads to massive waste and losses. Thus, in order for Turkey to prepare and implement plans, it is necessary to undertake a task of administrative reorganization.

Another condition of success in planning is the existence of a mechanism by which sound data may be collected and evaluated. In Turkey the data available and the mechanism which gathers such data are quite inadequate. Here too a real need exists for reorganization.

It would be incorrect, however, to assume that planning can be started only after administrative reforms and collection of sound data. The best course of action is to take rational decisions through sound evaluation of available data and to utilize the existing administrative machinery as effectively as possible. This will be possible only through adherence to the principles of planned action. Furthermore, the most effective approach would be to start with the existing potential in determining the requisites of efficacious planning and its appropriate methods as well as in defining and assessing the nature, accuracy and collection methods of data.

The foregoing justifies early commencement of planning work. However, several points must be taken into consideration. For the preparation and implementation of reliable plans priority must be given to essential and fundamental work over the day-to-day matters. Since information is often spotty, it is also necessary to leave room for frequent revisions and corrections in these programs. Finally, the condition of our implementing machinery necessitates being realistic in production goals.

In preparing the 1962 program and determining its contents, the above-mentioned considerations have played a dominant part.

The 1962 program gives priority to the fundamental measures which must be taken for a successful economic development. Therefore, the present document is more in the nature of a transitional program which will serve as a basis for further planning work. Therefore, reorganization measures hold an important place in this program. In order to realize the hopes attached to planning, it is essential to dwell on this aspect of the problem.

Another characteristic of the 1962 program is the cautious attitude which has been adopted with due regard to the limited data available, in proposing social and economic policy measures. Since taking broad and definite policy decisions according to data which have a wide margin of error might lead to deleterious consequences, proposals are made only in those fields where data are considered reliable.

One of the major sources of data is the so-called " Sectoral Committees " . These committees are made up of experts from various government departments and institutions. The activities of these committees are divided into 3 stages : 1) Inventory 2) Coordination 3) Development and pre-project analysis. Only the first stage and in some cases the second stage of the sectoral committees' work have been completed. After their work is advanced or completed, it will be possible to make more definite proposals and prepare further projects.

Planning is not a magic formula which solves all problems. Nor is it an activity confined to the preparation of a document. Planned development is a long and hard task, and requires a policy that is competent, scientific, honest, courageous, stable and above all supported by the majority. In fact, in all those countries which earnestly started to prepare development plans, planning work has lasted for at least several years and success has been attained only after continuous implementation of policies and careful scrutiny over long periods of time. It is imperative for countries which desire economic development to tread this hard path.

In Turkey where rapid development is essential, the 1962 program marks the first step towards planned development. It is our sincere hope that it will be a successful and auspicious start for Turkey.

SECTION ONE

ANALYSIS OF THE ECONOMIC SITUATION
AND
SUGGESTIONS AND RECOMMENDATIONS

1. ANALYSIS OF THE ECONOMIC SITUATION IN 1961

The available information has not permitted a comprehensive analysis of all the elements of the national budget. Therefore, only a cyclical analysis has been made on the basis of the most reliable indicators and with the economy as a whole in sight.

The Organisation will continue to pool and evaluate new information which will make a more systematic research possible in the future.

In order to determine the basic direction of the economic policy and the framework of public investments and the investments of State Economic Enterprises, it is essential that the economic situation be analyzed correctly and the basic problems formulated.

As the objectives of the general economic policy are speedy growth, high level of employment, price stability and equitable distribution of income, it would be appropriate to analyse the general economic situation within these contexts.

a. Development and Investment

It is well known that rapid development depends upon the level of investment. A high level of investment leads to a more rapid growth.

Analysis of the past two years has shown that, contrary to the current view, the level of investment did not decline. In fact, there have been some increases.

Since reliable investment figures for every sector of the economy are not available, the following indicators might be used to estimate the level of past investments:

Public Sector Investments : Table 1 shows that Public Sector (National budget, local authorities and State Economic Enterprises) investments registered an increase of 387,000,000.00 T.L. in 1960 and 949,000,000.00 in 1961.

Private Sector Investments : At present no reliable investment figures are available for all of the investments of the private sector. Therefore, industrial investments of the Industrial Development Bank of Turkey and the credits extended by the Estate and Loans Bank have been taken as an index of the level of investments in the private sector.

Investments of the Industrial Development Bank : In 1960 and 1961 the advances of the Bank have shown substantial increases over the past years. (See Table 2) The same tendency can also be observed in the number of applications for loans. Table 3 shows that such applications for credit increased in 1961.

In other words, the private sector has been rather anxious to increase its volume of investments.

TABLE : 1

PUBLIC EXPENDITURES AND INVESTMENTS

(Million T.L.)

	1958	1959	1960	1961
INVESTMENTS	2511	3174	3561	4310
a. State Budget	602	774	850	1336
b. Annex Budgets	943	1247	1485	1524
c. Local Authorities	383	432	420	400
d. State Economic Enterprises	583	721	806	1050
CURRENT EXPENDITURES	4283	5522	6003	7021
a. State Budget	3359	4501	5078	6076
b. Annex Budgets	184	264		
c. Local Authorities	740	757	925	945
TOTAL EXPENDITURES	6794	8904	9364	11331

The figures for 1958 and 1959 State Budgets are taken from actual accounts, the figures for Annex Budgets from the budget laws, and the figures for 1960 and 1961 from the budget laws.

TABLE : 2

INDUSTRIAL DEVELOPMENT BANK LOANS

YEARS	IN TL	IN DOLLARS
1957	22 150 985	2 461 219
1958	33 356 287	8 706 255
1959	12 938 743	3 492 923
1960	40 307 063	6 533 848
1961 (8 Months)	39 325 324	4 901 446

SOURCE : INDUSTRIAL DEVELOPMENT BANK

TABLE # 3
APPLICATIONS FOR LOANS
OF THE INDUSTRIAL DEVELOPMENT BANK

MONTHS	1960		1961	
	MILLION T.L.	DOLLARS (000)	MILLION T.L.	DOLLARS (000)
I	6.6	790	10.3	950
II	11.5	2050	5.0	572
III	12.5	560	8.9	1000
IV	3.4	650	7.4	490
V	13.5	100	13.5	2330
VI	2.6	195	2.9	310
VII	2.0	100	7.6	620
VIII	3.2	43	18.3	360
IX	4.7	925	22.8	1500

Investments in housing accounts for the major part of the total investment in the private sector. The loans of the Estate and Loans Bank (Emlak Kredi Bankasi) may be taken as the index of total investments in housing construction, because this bank grants loans only for construction purposes.

Loans made by the Estate and Loans Bank for residential construction have shown an increase of 209,300,000.00 T.L. in 1960. (See Table 4)

Table 5 shows the number of buildings which have been completed and registered with the revenue authorities in all provinces during 1960 and 1961. It further reveals an increase in the number and value of total construction in 1960.

Consumption of Cement and Iron : Consumption of cement and iron is a significant index of the volume of total investment. As a matter of fact, unless there is a radical change in the composition of investments, an increase in consumption of cement and iron would mean that an increase in the level of investment has taken place.

Cement consumption has shown increases in 1960 and in 1961 has exceeded the 1959 level. (See Table 6) Table 7 indicates that the increase in sales of iron and steel has been even more pronounced.

Imports of Investment Goods : For Turkey, the volume of imported investment goods is a most important determinant of the volume of total investments. Therefore, imports of such goods may be regarded as one of the indicators of investment level.

Imports of investment goods have increased considerably in 1960. (See Table 8) In 1961 the volume of imports declined. This can be explained partly in terms of new restrictions which were imposed upon the use of the funds provided by I.C.A. and partly by the fact that the volume of imports in 1959 and 1960 had been unusually high on account of the backlog of demand of the previous years for imported goods. Even if this tendency continues, it can be said that in 1961 imports of investment goods will be somewhere near the level of 1959.

All these observations point to the fact that last year and this year there has been no slowing down in investments. Undoubtedly, this does not mean that the rate of development is regarded as sufficient and satisfactory.

b. Employment and consumption

The level of employment in an economy is a function of investment as well as consumption. Since under normal conditions the propensity to consume could be regarded as constant and stable, it is usual to explain changes in employment and consumption in terms of fluctuations in investment volume.

It has been shown above that during the last two years, the level of investment showed no decrease. In fact there was a slight increase in the volume of investments. Therefore, the origin of the recession which has been causing complaints should be sought directly in a drop in the level of consumption. In a predominantly agricultural country like Turkey, unfavorable climate conditions create wide fluctuations in income which in turn influence the general level of employment. Thus, in such countries, it is obvious that fluctuations in general economic activity cannot be explained only in terms of the fluctuations in the volume of investments. Besides, during the last two years an abnormal political atmosphere has been present in Turkey. It is only too natural that such an atmosphere should play a large part in the psychological state of people in general and in consumption expenditure in particular.

Before proceeding further, it is necessary to determine the nature of the recession which has been causing complaints and which has been finding its expression in various spheres of activity. Table 9 shows the level of sales of various consumption goods.

As can be seen from this Table, sales of all such goods recorded a decline since 1958. Although there has been some recovery, the 1958 level has not yet been attained . In Table 9, textiles and transport figures do not embrace the whole economy. Therefore, it can be assumed that decreases in sales, particularly that of textiles, have not been expressed in their full extent. Moreover, according to this Table, it can safely be assumed that consumption has registered a definite decline. Recent research proves that there have been decreases in the sales of various consumption goods and services (furniture, kitchen utensils, tailoring, restaurants, etc.) whose total sales could not have been estimated.

This decline in consumption has naturally led to recession which found its expression in increased unemployment and lower profit margins for employers.

The increase in population in the period 1958-61 by2,500,000 created additional strains on the economy. Consequently, consumption per capita decreased more than is shown in Table 9.

The phenomena of increased volume of investment, accompanied by lower levels of consumption, may be regarded as paradoxical.

TABLE 4

LOANS OF THE ESTATE AND LOANS BANK

(in 000 TL.)

YEARS	LOANS	INCREASES
1957	1,224,303	194,125
1958	1,418,428	13,605
1959	1,432,038	209,299
1960	1,641,332	

TABLE : 5

BUILDINGS SUBJECT TO PROPERTY TAXES

YEARS	HOUSES		APARTMENTS		INNS, HOTELS, GARAGES MOVIES, THEATRES, etc.		SHOPS, STORES CASINOS, COFFEE HOU[illegible]		FACTORIES WORKSHOPS	
	NUMBER	GROSS INCOME (Mil.TL)	NUMBER	GROSS INCOME (Mil TL)	NUMBER	GROSS INCOME (Mil.TL)	NUMBER	GROSS INCOME (Mil TL)	NUMBER	GROSS INCOME (Mil TL)
1955	56 678	13.9	4.088	26.0	3.903	12.6	19.016	9.4	2 035	15.0
1956	67 843	17.9	3 005	21.0	4.335	10.9	19 566	10.1	2 172	20.4
1957	75 475	18.5	3 046	24.5	5 771	12.9	20 109	12.5	1 992	28.0
1958	76 809	22.0	2 576	26.5	4 739	14.5	21 863	17.3	2 130	19.0
1959	81 559	22.3	3 045	34.2	5 378	14.3	22 750	15.1	2 140	20.9
1960	97 465	28.1	5 296	42.7	4 733	11.0	24 927	15.4	1 996	216.1

SOURCE : MINISTRY OF FINANCE

TABLE 6

CEMENT POSITION

(In Tons)

YEARS	CAPACITY	PRODUCTION	IMPORTS	EXPORTS	CONSUMPTION	Consumption por capita
1950	395,000	395,630	134 914	-	530,544	25
1951	395,000	396,324	243,267	-	639,591	29
1952	495 000	459.073	389,462	-	1,048,535	38
1953	645,000	530,872	536,807	-	1,067,679	46
1954	1 010,000	703,291	628,687	-	1,331,978	56
1955	1 010,000	819,308	810 588	-	1,629,896	63
1956	1,195,000	970,051	293,204	-	1,263,255	51
1957	1 700,000	1 261 187	299,246	-	1,539,990	60
1958	1,877,500	1,516,513	19,813	-	1,153,878	57
1959	1,962,500	1,734,147	2,111	18,000	1,749,895	64
1960	1,962,500	2 037,796	4,231	69,309	1,973,895	70
1961 *	1,962,500	1,261,000	1,337	1,200		

SOURCE : TURKISH CEMENT INDUSTRY

(*) End of August - 1961

TABLE: 1
1950-1960 Years

IRON - STEEL

Years	Production(1)		Imports		Exports		Internal Sales	Stocks	Consumption per capita
	(000 tons)	(Million TL)	(000 tons)	(Million TL)	(000 tons)	(Million TL)	(000 tons)	(Million TL)	Kg.
1950	91	167	216	98	2.7	.2	304	263	14.5
1951	127	236	179	112	51.7	7	245	341	11.3
1952	132	246	234	169	62.2	9.2	304	406	13.7
1953	153	285	368	207	11.2	1.5	510	490	22.2
1954	151	278	227	146	2.8	.3	375	424	16
1955	172	303	299	192	23	3	444	492	18.4
1956	193	338	189	129	1.9	.3	378	467	15.3
1957	194	339	111	84	19.9	3.2	285	420	11.2
1958	178	272	94	67	.3	-	272	339	10.4
1959	223	337	241	123	1	.1	463	460	17.1
1960(2)	194	294	190	95	10.4	1.3	374	288	19.7
1960(3)	96	146	90	147	10.5	6.9	175	286	-
1960	290	440	280	140	20.9	2.6	549	577	19.7
1961(4)	175	263	110	186	44	2.6	241	423	16.9

(1) : Based on December 1959 Karabük prices
(2) : Dollar 2.80 TL. (January-August 1960)
(3) : Dollar 9.00 TL. (September-December 1960)
(4) : Only the first half of 1961 included

SOURCES : 1. Coppers Report
2. Monthly Bulletins of Statistics
3. Inventory work of the Iron Steel and Mining Committee
4. General Directory of Iron and Steel

TABLE : 8

IMPORTS

Years	TOTAL		Consumption Goods		Raw Materials		Investment Goods	
	Quantity (Tons)	Value (1000) $	Quantity (Tons)	Value (1000) $	Quantity (Tons)	Value (1000) $	Quantity (Tons)	Value (1000) $
1958	1.451,694	315.098	204.434	38,525	1.073,785	140,251	173,475	136,322
1959	2,420,927	469,982	331.453	47.733	1,830,718	207,888	253.756	214,361
1960	2,161.955	468.185	262,236	44,983	1,418,809	179,117	480,910	244,085

VALUES OF THE FIRST SIX MONTHS OF 1960 AND 1961 ($ 1,000)

Years	6 Month Total	Construction Material		Machinery and Equipment		Total Investment	Ratio of Investment
	(1000) $	(1000) $	%	(1000) $	%	(1000) $	%
(1960) 6 months	231,651	16,715	7.21	103.589	44.72	120.305	51,93
(1961 6 months	197,002	17,158	8.71	84.958	43.13	102,116	51.84
1960 January- Oct. (8 months)	392,235						
1961 January - October (8 months)	379,871						

Source : Monthly Bulletins of the Central Statistical Office.

In fact, there are various factors which explain this situation :

1. Certain marginal firms which had been able to operate under inflationary conditions and during the shortage of imported goods, were forced to stop their activities as a result of an increase in imports on the one hand and the termination of inflationary tendencies on the other. Thus, a certain amount of plants and machinery were left idle and workers employed at such firms were laid off. It can be stated with confidence that a part of the increase in unemployment and recession results from the foregoing. It is certain, however, that such excess capacity and unemployment are structural and therefore cannot be remedied under normal conditions. This does not mean that the existence of such excess capacity and of unemployment is desirable.

2. Another factor which led to a decline in the aggregate demand was the drop in agricultural incomes. It is known that during the past two years harvests were rather poor. Furthermore, the prices of tobacco and sugar beet which are important cash crops were fixed at a lower level. Therefore, there has been a decline in the income (particularly the cash income) of the agricultural community. Agricultural loans also declined in real terms.

3. Another factor was the extraordinary political events which led consumers to curtailing their current expenditure and increasing their cash savings. Furthermore, there has been no increase in the volume of the real supply of money in circulation. Therefore, the aggregate demand has declined as a result of the slowing down of velocity of circulation while the total money supply remained static. Another aspect of this situation is discussed in the following paragraph where related tables are also shown.

TABLE :9

VOLUME OF INTERNAL SALES

(Monthly Averages)

Years	Sugar (Tons)	Cigarettes (Tons)	Beer 1000 liters	Raki 1000 liters	Cotton Goods (x) 1000 Met.	Woollen Goods (x) 1000 Met.	Paper and Cardboard 1000 Tons	Commercial Transport (x) 1000 Tons
1958	25,242	2,369	2,582	1194	12.121	329	4724	1306
1959	23,610	2.195	2.297	1093	12.460	364	4244	1279
1960	24,823	2.275	2.434	1065	11,103	401	4376	1122
1960 First half	26,261	2,099	2,145	919	9.997	378	3916	2419
1961 First half	30,109	2,203	2,308	913	9,527	344	5359	792

(x) Puplic Sector Only

c. Price stability

Prices have attained stability in the past two years as a result of the curb on inflation. This action has brought about an improvement in the value of our currency in terms of foreign currencies and gold. In fact, at the end of 1959, the rate of exchange between the U.S. dollar and the Turkish lira stood at 14.80 TL.= 1.00 in the free market. At present, the rate of exchange stands at 11.40 TL. for $ 1.00 In the same period, the price of government-backed gold dropped from 148 to 100 TL. The improvement in the exchange rate and the decline in gold prices are the result of not only the stability in prices which has been experienced but also of the now established belief that such price stability will persist.

In Tables 10 and 11 a - 11 b, wholesale prices and cost of living indices are shown.

A close examination of Table 11 will show that not all commodity groups have enjoyed price stability. In fact, the prices of food stuffs have shown a gradual rise while prices of other commodities moved in the opposite direction. Over-all price stability was the result of the balancing action of these opposing price movements.

General price level and money supply are closely related. Therefore, it is essential to examine the variations in the supply of money in order to throw light on the nature of this price stability. Table 12 shows the variations in the supply of money. As will be noted in this Table, while the supply of money has increased, by 444,000.000.00 TL. (8.5 per cent) since May 1960, the general level of prices has declined somewhat. This situation can be explained largely by the fact that the demand for money increased i.e. consumers expanded their savings; in other words, the velocity of circulation slowed down. We have already indicated that the volume of transactions in real terms declined or at least did not increase. The fall in the prices of gold and property at present shows that speculative transactions have declined and the economy is more liquid than in the previous two years. This means that in the event of an increase in the velocity of circulation, a threat of inflationary pressure might develop. But this possibility should not be over-emphasized. In all probability, the velocity of circulation will never reach its previous levels. In other words, consumers will continue their preference for maintaining larger cash stocks. Thus the threat of inflation due to high liquidity will not be too serious.

TABLE 10

COST OF LIVING INDEX 1948=100

(ANKARA)

MONTHS	GENERAL INDEX			FOOD			CLOTHING			HOUSING EXPENDITURES			MISCELLANEOUS		
	1959	1960	1961	1959	1960	1961	1959	1960	1961	1959	1960	1961	1959	1960	1961
I	254.7	280.4	271.8	262.9	289.6	298.8	275.3	276.1	257.0	229.0	246.9	232.0	239.9	280.8	309.2
II	254.7	283.3	274.1	263.2	304.4	294.3	274.7	276.1	257.0	229.1	247.2	232.0	239.9	280.8	309.2
III	261.8	280.3	274.1	271.1	305.4	296.3	274.9	276.1	257.7	227.3	233.2	228.7	278.4	280.8	309.2
IV	266.3	280.1	283.3	281.2	309.6	314.2	274.2	265.0	259.2	225.9	231.7	228.6	278.4	280.8	309.2
V	258.8	279.9	275.8	263.1	309.2	298.9	274.2	265.0	259.7	231.5	231.9	2 8.2	278.4	280.8	309.2
VI	269.6	279.5	264.9	281.7	308.6	286.0	276.3	265.0	258.9	239.9	231.3	232.2	278.4	280.8	309.2
VII	264.3	265.9		270.9	381.0		271.4	263.7		240.5	231.5		278.4	280.8	
VIII	261.6	260.4		265.4	269.9		270.9	263.7		240.9	231.0		278.4	280.8	
IX	268.4	261.0		278.2	271.5		269.0	262.3		244.4	231.5		278.4	280.8	
X	273.2	264.7		289.0	279.0		266.8	262.3		244.2	231.5		278.4	280.8	
XI	276.9	268.9		293.4	289.0		272.9	259.2		245.6	231.3		279.4	280.8	
XII	279.4	269.0		298.0	289.0		272.9	259.3		246.8	229.7		279.7	280.8	

SOURCE : MONTHLY BULLETINS OF THE CENTRAL STATISTICAL OFFICE

d. Distribution of income

During the last two years, the Government introduced the following measures which have had the effect of redistributing the national income among various income-groups.

a) Raises in Civil Servant Salaries.
b) Reduction of sugar beet prices.
c) Increases in prices of grains.
d) Introduction of new taxes.

Moreover, there has been a reduction in profit margins, but this was due less to direct governmental intervention than the overall developments in the economy in particular, the end of inflation.

Salary raises were given to Civil Servants to rectify an injustice. The reduction of sugar beet prices was not so much a move towards redistribution of income as a means of discouraging the expasion of sugar beets production and reducing the cost of sugar production. On the other hand, increases in prices of grains can be regarded, like the raises for Civil Servants, as an adjustment in income distribution. As there is no large group in Turkey whose earnings depend upon interest, increases in the rate of interest have had no appreciable effects.

Introduction of new taxes will make the owners of agricultural property and small businessmen and traders subject to direct taxes or increase the rate of existing ones. This will have the effect of reducing the income of these groups in the future. But without a knowledge of the amount of revenues collected from these taxes, it will not be possible to have a definite idea about the extent of this reduction.

In summing up, it can be stated that during the last two years a major change has not come about in the distribution of income compared with the previous years. However, this should not be construed to mean that distribution of income is equitable and requires no revision.

Table : 11 a
WHOLESALE PRICE INDICES
(1948 = 100)

Months	General Index			Food Stuffs and Animal Foods											
				Total			Plant Products			Animals			Animal Products		
	1959	1960	1961	1959	1960	1961	1959	1960	1961	1959	1960	1961	1959	1960	1961
I	231	259	256	209	245	244	201	238	243	326	303	283	194	251	245
II	232	261	251	213	248	252	208	240	253	364	322	308	191	249	248
III	236	261	264	217	249	256	208	242	255	367	324	323	187	243	243
IV	237	259	262	218	247	257	211	239	260	374	323	302	178	244	239
	239	260	264	217	249	259	210	243	268	362	339	306	177	239	257
VI	246	255	261	230	241	256	226	244	268	363	285	275	195	231	231
VII	244	250		225	233		223	239		350	270		201	233	
VIII	245	249		227	232		228	237		328	249		206	239	
IX	248	252		234	235		235	237		314	257		214	241	
X	250	251		234	234		236	237		296	238		218	249	
XI	248	252		232	235		230	238		293	242		225	246	
XII	253	254		237	241		233	242		291	256		229	247	

Source :. Monthly Bulletins of the Central Statistical Office

TABLE : 11 b

WHOLESALE PRICE INDICES

(1948 = 100)

INDUSTRIAL RAW MATERIALS AND SEMI - FINISHED ARTICLES

Months	Total			Textiles			Fuel Oil			Construction Materials 1)		
	1959	1960	1961	1959	1960	1961	1959	1960	1961	1959	1960	1961
I	280	289	282	278	303	303	207	204	204	272	286	271
II	274	290	280	290	307	295	208	204	237	271	289	272
III	277	286	279	294	286	302	206	204	235	268	290	270
IV	277	286	274	287	285	294	207	205	238	273	290	270
V	287	283	273	296	281	292	206	204	240	269	287	269
VI	279	284	272	288	282	290	210	204	239	265	289	269
VII	283	284		289	277		205	205		275	289	
VIII	282	285		289	284		209	205		281	290	
IX	277	288		288	298		210	204		280	286	
X	284	287		298	296		208	204		280	286	
XI	283	287		299	299		212	204		280	273	
XII	288	282		306	298		206	205		281	273	

TABLE : 12

SUPPLY OF MONEY

Million TL.

Year and Months	Currency			Deposit Money Commercial Deposits			Money Supply	Price Index	Trends in bank note volume in terms of 1948 constant prices	Trends in volume of money in terms of 1948 constant prices
	Banknotes	Coins	Total	At Commercial Banks	At the Central Bank	Total				
1960/III	3435	118	3553	1501	184	1685	5238	280,3	1125	1869
VI	3674	119	3793	1383	174	1557	5350	279,5	1314	1914
VII	3851	119	3970	1406	212	1618	5588	265,9	1448	2101
VIII	3758	121	3879	1392	181	1573	5452	260,4	1443	2094
IX	3817	124	3941	1354	148	1502	5443	261,0	1462	2085
X	3950	126	4076	1424	178	1602	5678	264,7	1492	2145
(x) XI	3816	128	3944	1460	168	1628	5572	268,9	1419	2072
1961/I	3722	135	3857	1511	152	1663	5520	271,8	1369	2031
(x) II	3716	140	3856	1550	170	1720	5576	274,1	1356	2034
(x)III	3852	145	3997	1454	159	1613	5610	274,3	1404	2045
(x)IV	3822	151	3973	1446	215	1661	5634	283,3	1349	1939
V	3874	117	3991	1440	196	1636	5627	275,8	1404	2040
VI	3864	123	3987	1468	199	1667	5654	275,8 (1)	1401	2050
VII	3870	129	3999	1510	173	1683	5682		1403	2060

(x) Provisional figures

(1) Five-Month Average of Constant Prices of 1961

Source : Central Bank of the Republic of Turkey

2. RECOMMENDATIONS FOR 1962

a. Probabilities

Analyses made above show that the economy in general is functioning below capacity, especially in sectors which produce consumption goods. This means that in 1962 total expenditure may be increased without endangering price stability.

Total expenditure may be increased either by increasing investment expenditure or consumption expenditure or both. Therefore, first of all, a decision must be reached as to which type of expenditure will be increased. If both will be increased, it must be determined which will be the main field and which the complementary field.

As development is the guiding consideration in reaching a decision on this matter, investment expenditure should be recommended as the main field in which to increase spending. In this case, it is necessary to bear in mind the following points :

(1) State of supply of investment goods.

(2) Possibility of full utilization of existing capacity in consumers' goods producing industries.

(1) Any increase in expenditure on investment goods will naturally expand the demand for such goods as iron, cement, machinery and equipment. If this rise in demand is not accompanied by a similar rise in supply, prices will be pushed upwards.

Should this occur, price increases will not be confined to such investment goods, but will spread out and will gradually create a trend for the prices of other goods to rise. Thus the existing price stability will be endangered. Therefore, it is essential to examine the short-term supply conditions of these investment goods.

In the second half of 1961, a shortage was beginning to be felt for cement, one of the most important investment materials. However, it must be borne in mind that the existing cement factories have been operating somewhere near their guaranteed capacity. As will be noted in the report on cement production, it is one of the characteristics of this industry to produce 25-30 per cent in excess of its guaranteed capacity. Furthermore, additional capacity is under construction. The Bartin, Söke, and Konya cement factories will add 555 thousand tons to the total capacity of this industry. Therefore, in the near future no danger of shortage in cement is likely to develop in the near future.

Increased demand for iron and steel can be met after partial comletion of the new works in Karabük in 1962.

Demand for essential imported investment goods will increase to a certain extent. Unless import arrangements can be made, the level of investments may fall short of the desired rise. In the estimates of the balance of payments as will be noted below, the additional need for imported investment goods required for increased investment has been taken into account.

(2) Another question which should be considered is whether or not expansion in investment expenditure will be sufficient to utilize the full capacity of those industries which produce consumption goods. If it is thought that it will not be sufficient, then direct measures to increase consumption must be introduced. However, a change in the people's cautious attitude, which has lowered the general consumption trend, might take place. Considering the possibility of the return of the increased liquid funds, an increase in investment expenditure may be regarded as sufficient.

In the event that liquid funds return to the markets, a small additional volume of imports will contribute to the maintenance of stability.

b. Investment volume and its Financing

(1) Public Sector :

In view of the considerations and limitations mentioned above, a volume of investment of 5,000,000,000.00 TL. in the public sector will be possible in 1962 without endangering price stability. Table 13 shows the main investment fields. In 1962, public sector expenditure is expected to increase about 1,600,000,000.00 TL. This amount represents a 14 per cent increase over the 1961 expenditure.

Table 14 shows the resources which will finance the public sector expenditures.

(2) Private Sector :

There is no question of direct governmental intervention in reaching a decision about the volume of investment expenditure in the private sector, Only through monetary and fiscal policies can such an influence be envisaged.

Private sector investments can best be studied under two separate headings. Investment expenditure for housing construction has a social aspect and cannot be considered solely on the basis of productivity. In fact, the rate of interest on loans given for this purpose represents a special case. The present condition of this sector is quite satisfactory in terms of actual expenditure. It is inevitable that by making it easier to obtain credit for housing contruction a certain amount of funds are drawn into this field which might otherwise be invested for industrial purposes. To mitigate this rather undesirable result, attempts should be made to lower the cost of construction and build more houses with the same investment expenditure. For this, inexpensive types of houses should be developed in terms of size and building materials, and easier and better terms should be offered.

The decisive factor in industrial investment is productivity. To enable our industries to have a strong base and compete in the international markets, this consideration should be uppermost. Therefore, large scale industrial investment should be given top priority and utmost care shown before providing protection and encouragement to small-scale production units.

c. Foreign Trade

(1) Imports :

Table 15 and its explanatory note furnish the balance of payments estimates for 1962 and the basis of these estimates.

For 1962 an import program of $ 560,000,000.00 has been designed. The program envisages an appreciable increase, particularly in investment goods, over the position expected to be realized in 1961. It is thought best that $ 235,000,000.00 of this total should be allocated to imports of investment goods. According to estimates, $ 105,000,000.00 worth of imports are related to infastructure and off-shore, D.L.F., IBRD Eximbank and private foreign capital.

TABLE : 13

Expenditures of Public Sector

(Million TL.)

		1961	1962	
1.	Budget (Total)	8,936	10,115	(x)
	Investments (Central and Annex Budgets)	2,860	3,100	
2.	State Economic Enterprises	1,050	1,486	(xx)
3.	Local Authorities	1,345	1,345	
	Total Expenditures	11,331	12,946	
	Total Investments	4,360	4,986	

(x) Exclusive of the transfer of investment funds to State Economic Enterprises (241,000,000,00 TL.)

(xx) Exclusive of the transfer to the Eregli Iron and Steel Plants (116,000,000.00 TL.)

TABLE : 14

Sources of Public Expenditures

(Million TL.)

	1961	1962
Budget Revenues (*)	8,125	9,183
State Economic Enterprises	530	546
Local Authorities	1,345	1,345
Counterpart funds	1,481	1,988
TOTAL	11,481	13,062
Transfers for Eregli Iron and Steel	-	-116
	11,481	12,946

(*) Ministry of Finance Budget estimates for Central and Annexed Budgets

Use Of Counterpart Funds

		1962 Budget	State Enterp.	Private Sector	Total
U.S.A ($ 90)	(490)	700	190	210	1,100
U.S.A Surplus (Old)	210)				
U.S.A Surplus (New)	400)				
German Credit (Old)	103	103	-	-	103
German Credit (New)	225	-	225	-	225
Other Counterpart Funds	810	370	400	40	810
TOTAL	2,238	1,173	815	250	2,238

(2) Exports :

During the last 10 years export earnings showed no significant increases. It is extremely difficult to achieve an appreciable increase in these earnings in 1962. In view of the export earnings of the last 3 years, probable developments in the future, estimates of the production of some important export items and stocks which will be available for 1962 from 1961, it is expected that in 1962 export earnings will be in the region of $ 325,000,000.00 .

(3) Balance of Payments :

As can be seen in the balance of payments for 1962, export earnings will meet less than half (46 per cent) of the total foreign currency requirements. At present this gap is closed with the help of our allies. But this situation cannot be expected to last indefinitely. Therefore, we must find ways of increasing our exports earnings and replacing our imports.

Thus, in our investment policy prime priority must be given to the encouragement of export industries and import replacing industries in the long and short-run. Furthermore, the activities of the Export Encouragement Center in the field of market research and other fields should be expanded.

In 1962 there is need for an additional $ 90,000,000.00 credit over and above the loans and grants which have already been obtained. This sum will make it possible to embark upon new projects in the public sector.

d. Conclusion

Total budget figures and the volume of investments recommended in this program have been based on careful research. In these surveys, only the information which, in our opinion, is reliable has been used. Nevertheless, it is possible that, as a result of the insufficiency of the available figures and information, unfavorable weather conditions, and the failure of the expected foreign aid to materialize , and the volume of investment recommended for the public sector might upset the price stability or might prove inadequate.

Consequently, developments in business activity must be followed in order to adopt measures according to the general state of the economy, i.e, when there is a tendency for inflationary pressure to develop, expenditure should be curtailed.

and in the case of a tendency for a slow-down of economic activities, measures should be adopted to increase expenditure. Although it is difficult to increase or decrease the public spending in the short-run, developing certain measures might be considered to facilitate such variations in the public spending.

As a conclusion it can be said that unless climate conditions prove very unfavorable and the expected foreign grants and loans fail to materialize, a public expenditure of 12,946,000,000.00 will be sufficient to create the desired boost in the economy without lending to an undue pressure upon Turkey's available resources. The State Budget and the programs of the State Economic Enterprises must be prepared on the basis of the foregoing estimate.

TABLE 15

1962 ESTIMATES of EXPORTS, IMPORTS
and
BALANCE OF PAYMENTS

		Million Dollars
1.	Imports (normal)	380.0
2.	C.C.C.	70.0
3.	Infrastructure and Offshore	25.0
4.	DLF, IBRD and Eximbank	65.0 (1)
5.	Private foreign investments	20.0 (2)
	Total Imports	560.0 (5)
6.	Exports	325.0
	Balance of Trade	-325.0
7.	Invisibles (net)	-45.0
8.	Infrastructure and Offshore	+45.0
	Current Balance of Payments	-235.0
9.	ICA Aid	+70.0
10.	C.C.C.	+70,0
11.	DLF, IBRD and Eximbank	+65.0
12.	German Credits	+25.0
13.	Private foreign investments	+25.0 (3)
14.	Credits of foreign exporters	+15.0
	Total of investment income	+270.0
15.	Total of repayment commitments	-125.0 (4)
	General Balance of Payments	-90.0

NOTE :

(1)

	DLF	Eximbank	IBRD
Imports for Ereğli Iron and Steel Plant	41.0		
Turkish Coal Exploitation (T.K.I.)	6.0	2.0	
Electricity Investments of Etibank and Iller Bankasi	3.0		
Karabük Iron and Steel Plant		10.0	
Forestry Administration		1.5	
Çukurova Electricity Corporation..			1.5
TOTAL :	50.0	13.5	1.5

(2)

Imports of Izmit and Mersin refineries	15.0
Imports for tyre and tube factories and other private Investments	5.0
	20.0

(3)

Refineries	17.5
Other Private Investments	7.5
	25.0

(4)

Debt repayments :

- Public debts repayments	46.9
- Consolidated debts "	37.6
- Imports on credit "	22.0
- Banking credits "	15.0
- Other Debts "	3.5
	125.0

(5)

Allocation of Imports :

	Investment Goods	Raw Materials	Consumption Goods	Total
1. Imports (normal)	130.0	200.0	50.0	380.0
a. U.S. agricultural products surplus.....	-	15.0	55.0	70.0
b. Infrastructure and Offshore	20.0	5.0	-	25.0
c. D.L.F., IBRD and Eximbank	65.0	-	-	65.0
d. Private foreign investments	20.0	-	-	20.0
TOTAL :	235.0	220.0	205.0	560.0

ESTIMATES OF NATIONAL FINANCIAL RESOURCES AND EXPENDITURES FOR 1962

These estimates are based on 1961 prices, thus making possible a direct comparison between 1961 and 1962. The increases shown are actual increases.

Agricultural incomes, which are the most important part of Turkey's national income, are estimated according to the yield trends of the last 20 years and specific forecasts of the 1962 production levels. It is expected that in agricultural production there will be a 6 per cent increase over the 1961 level. Thus in 1962, the production level of this sector will reach the level attained in 1960.

Bearing in mind the investment expenditure of 1961 and the amount of unused capacity, it is estimated that incomes (resources) created in the industrial sector will show an increase of 8 per cent over 1961. In fact, an increase of this magnitude is regarded as the minimum if the expected rise in the national income is to be realized.

It has been estimated that there will be a 7 per cent increase in the construction industry. The estimate is based on the 1962 investment expenditure, the number of building permits issued during 1961, and the trend of the number of new buildings registered with the tax authorities until 1961.

The increase in trading services was estimated on the basis of the parallel relationship between trading activities and agricultural incomes

The elasticity of the transportation industry is 1.2 compared with National Income; therefore, an increase of 8.4 per cent can be expected in this sector during 1962. Financial institutions and private professions are two flourishing and expanding lines of activity. However, inasmuch as there was a slight downward trend in the rate of increase in these activities during recent years, a minimum 7 per cent increase is expected in 1962.

The cost of Government services has been increased at the same rate as the increase of personnel expenditure already indicated in the 1962 Budget.

Therefore, it is estimated that incomes generated within the country during 1962 will total 45,311,100,000.00 TL. From this amount we must deduct 245 million TL. which is made up of revenue received from outside of Turkey and also deduct amounts for repayments of debts. To this figure we must add the revenues collected from indirect taxes which will yield the Net National Income figure based on market prices.

Gross National Product is calculated by adding the amount of depreciation to the net national product. Total resources are calculated by adding the trade balance to the net national product.

EXPENDITURE

To avert the stagnation which has been present in the economy during 1961, an investment expenditure of 4,986,000,000.00 TL. has been planned for the Public Sector. This means that the investment expenditure of the Public Sector in 1962 will be increased by 16 per cent over 1961. This investment expenditure level of 4,986,000,000.00 TL. has been determined by taking on the one hand, the total public revenue (taxes, incomes of the State Economic Enterprises, Counterpart fund, incomes of Local Authorities) and on the other, total current expenditure which must be made . 3,100,000,000.00 TL. of this total investment expenditure will be undertaken(1) by the General and Annexed Budgets. An investment expenditure of 400,000,000.00 TL. will be made by the local authorities. The State Economic Enterprises will invest 1,500,000.000.00 TL.

According to estimates, investments of the private sector will reach 3.450,000,000.00 TL. in 1962. This amount represents a substantial (27 per cent) increase over 1961. However, it must be understood that 1961 cannot be taken as a normal year for comparison. In fact, the amount of investment expenditure estimated for 1962 represents a decrease of 531,000,000.00 TL. compared with 1960.

The 1962 forecast is based on the relationship which has prevailed between public and private sector investments. However, the amount thus determined has been adjusted in terms of the major investments to be made in the course of next year.

Investments in housing construction are expected to be 8 per cent above the previous year's figure. It can reasonably be expected that during a period of stable prices such an investment level would be attained. Applications made for construction permits confirm the expected increase of 8 per cent.

Current public expenditure is estimated to be 7,960,000,000.00 TL. and 7,015,000,000.00 TL. of this sum will come from the General and Annex Budgets (1), and 945,000,000.00 TL. from the Local authorities.

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(1) This figure is 3,359,000,000.00 TL. in the Budget. The difference is due to the transfers made to the State Economic Enterprises as shown in investment tables.

The remaining 38,384,000,000.00 TL. represents the consumption expenditure of the private sector in 1962. This amount shows an increase of approximately 3 per cent over 1961.

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(1) The difference between this and the budget figures is due to the transfers made to the State Economic Enterprises.

NATIONAL RESOURCES AND EXPENDITURES (x)

(at 1961 prices in million TL.)

RESOURCES	1959	1960	1961	1962
1. Agriculture	17 618.5	18 376.4	17 420.9	18 466.1
2. Industry	7 321.6	7 302.0	7 220.4	7 798.1
3. Construction	2 739.2	2 268.6	2 364.7	2 530.5
4. Wholesale and retail trade	3 704.3	3 863.5	3 511.5	3 757.0
5. Transportation, communications	2 632.8	2 953.8	2 823.7	3 061.0
6. Financial Institutions	1 052.1	3 026.3	3 167.8	3 389.6
7. Private professions and services	1 735.0			
8. Ownership of dwellings	1 350.8	1 45[illegible].4	1 581.0	1 708.5
9. Government Services	3 439.4	3 839.6	4 182.0	4 600.3
10. DOMESTIC INCOME	41 593.7	43 081.0	42 272.0	45 311.1
11. Income from rest of the world	- 250.6	- 245.7	- 250.0	- 245.1
12. NET NATIONAL PRODUCT (at factor costs)	41 343.1	42 835.3	42 022.0	45 066.0
13. Indirect Taxes	4 779.8	4 998.0	4 998.0	5 304.0
14. NET NATIONAL PRODUCT (at market prices)	46 122.1	47 833.3	47 020.0	50 370.0
15. Depreciation Allowances	2 023.9	2 108.3	2 193.0	2 295.0
16. GROSS NATIONAL PRODUCT (at market prices)	48 146.0	49 941.6	49 213.0	52 665.0
17. Trade Balance (Exports-Imports)	1 126.0	1 397.4	1 430.0	2 115.0
18. TOTAL RESOURCES	49 272.0	51 339.0	50 643.0	54 780.0

- Continued -

NATIONAL RESOURCES AND EXPENDITURES (x)

(at 1961 prices in million TL.)

EXPENDITURES	1959	1960	1961	1962
1. Public Investments	3 415	3 632	4 310	4 986
a) General and Annexed Budgets	2 174	2 382	2 860	3 100
b) Local Authorities	465	428	400	400
c) State Economic Enterprises	776	822	1 050	1 486
2. Private Investments	3 574	3 981	2 714	3 450
a) Construction of Housing	1 873	2 199	1 945	2 100
b) Others	1 701	1 782	769	1 350
3. Total Investments	6 989	7 613	7 024	8 436
4. Current Public Expenditure	5 941	6 122	7 021	7 960
a) General and Annexed Budgets	5 127	5 179	6 076	7 015
b) Local Authorities	814	943	945	945
5. Private Consumption Expenditures	36 342	37 504	36 598	38 384
6. TOTAL EXPENDITURES	49 272	51 339	50 643	54 780

(x) Estimates based on provisional figures provided by the State Planning Organization.

SECTION TWO

SECTOR ANALYSES

Sector Analyses

1. In the first part of this program estimates were made about the general condition of the economy and the developments which will occur in 1962, and measures were recommended in order to realize these estimates.

Apart from the above conditions which are necessary for the attainment of the desired level of development, there should be no bottlenecks in the economy. Therefore, in order to prevent possible bottlenecks, specific goods and services that are of a nature that will influence a major part of the economy had to be studied more closely, and an investigation made to determine whether or not there is an imbalance between their supply and demand.

2. Energy rates first among these specific items. In addition to the 1962 supply and demand balance of the energy sector, which is closely related to the general volume of economic activity, long-term needs must also be considered. An increase in production in this sector requires extensive preparations. Consequently, among the tasks to be accomplished in 1962, emphasis was placed on the necessity of determining the needs of the following years and on making plans .

Another balance which is closely related to the development of the economy is the production and supply of iron, steel and cement. In order to realize the desired investments without running into bottlenecks, necessary measures were studied with an eye to establishing and maintaining a balance in the supply and demand of iron and steel and cement in 1962. Moreover, considering the vital importance of this sector, recommendations were made in the 1962 program in order to prevent a bottleneck in the basic inputs in the following years.

The agricultural sector and other production sectors which obtain their raw materials from agriculture were taken up as another group. Since the goods in this group constitute a major part of Turkey's exports, maintaining a high rate of growth partly depends on exporting these goods in amounts that will be increasing in the following years. On the other hand, since a major part of consumption goods are produced in this sector, a survey has been made as to whether production in 1962 will meet the increasing demand, due to the influence of factors like an increase in population, changes in the standard of living, etc. In this group, the study of the balance of production and supply in 1962 was given priority and measures were suggested in order to achieve a balance. Furthermore, since the problems of the agricultural sector have a long-term character, emphasis was placed on determining and coordinating in the course of 1962 the subsequent measures to be taken in this respect.

3. Not all the sectors were considered in the program, nor were all problems mentioned in the sectors considered.

Since data could not be obtained or there was a relative lack of information which would make a sound estimate impossible in certain sectors, it has been preferred not to make estimates on such sectors instead of making an incomplete estimate based on previous years. Well-known problems in some of the other sectors were only briefly mentioned.

On the other hand, some problems are common to all sectors. Therefore, these problems were not mentioned in considering each sector separately.

One is confronted with problems of the same nature especially in the State Enterprises. Problems like high production cost, excess personnel are common in all sectors. The number of persons employed in some of the sectors hinders efficient operation of those sectors. This and many other problems of organization create business administration problems, and consequently costs increase. The need to decrease costs in one of the problems that should be studied by all the State Economic Enterprises.

4. Individual sector analyses were made according to the following plan:

-- Present condition of the sector
-- Estimates about 1962
-- Problems
-- Suggestions and recommendations for 1962

5. The inventory type of work performed by the committees of specialists composed of representatives of the ministries, government departments and professional organizations primarily concerned with the sector, and an expert and an assistant expert from the State Planning Organization, constitutes the basis for the data obtained on the sectors.

1. ENERGY SECTOR

At present, Turkey's energy requirements are met from six main sources of primary energy. These are coal, lignite, hydraulic energy, petroleum, fire wood, and animal waste. In general, these resources are adequate to meet the country's needs, except for petroleum products. Oil exploration undertaken in Turkey has progressed in a promising way.

1960's primary energy consumption in terms of uses is given below in thousands of tons :

(in 1.000 Tons)

	Private Consump.	Industry	Transportation	Agricult.	Power Generat.	Gas Production	Coke Production	Total
COAL	221	1.530	1,081	-	597	189	226	3.899
Coke	398	311	3	-	-	45	-	755
LIGNITE	1.290	778	229	-	457	-	-	2,754
Briquettes	17	-	134	-	-	-	-	151
PETROLEUM PRODUCTS (x)								
Gasoline	55	18	218	11	-	-	-	365
Kerosene	185	-	79	-	-	-	-	265
Gas Oil	26	64	219	53	77	-	-	439
Fuel Oil	-	29	164	-	-	-	-	193
ANIMAL WASTE(xx)	14.000	-	-	-	-	-	-	14.000
FIRE WOOD	11.500	1.500	-	-	-	-	-	13,000
ELECTRICITY								
Hydro (mil.Kwh)	197	590	17	-	-	-	-	804
Thermal(mil.Kwh)	500	1,535	50	-	-	-	-	2,085

(x) Exclusive of military requirements

(xx) The figures given here for firewood and animal waste are those obtained as a result of the work of the Specialised Committees. Fire-wood figures are derived from statistics collected by the Directorate General of Forests for the entire country; those for animal waste were computed on the basis of estimates of the number of livestock in the country. These figures are included in order to show in a rough way the large extent of the use of these two materials, which are valuable for other purposes as well.

The foregoing figures may be expressed in terms of a common unit, that is, in terms of their theoretical coal equivalent, as follows :

Coal	3.899.000	tons of coal
Lignite equivalent	1.490.000	" " "
Petroleum "	1.920.000	" " "
Animal Waste "	5.000.000	" " "
Fire Wood "	5.500.000	" " "
Hydro Power "	110.000	" " "
Total	17.919.000	" " "

It can be seen from this that Turkey's total energy consumption in 1960 is equivalent to 18,000,000 tons of coal.

According to the above estimates and calculations, the part that various types of primary energy play in meeting Turkey's total energy requirements are :

	%
Coal	22
Lignite	8
Petroleum Products	11
Animal Waste	28
Fire Wood	30
Hydro Power	1
TOTAL	100

This is an undesirable distribution. From the point of view of the national economy, it is necessary to seek ways to prevent the consumption of large quantities of fire wood and animal waste and to provide consumers with substitute fuels.

At present no clear or definite energy policy has been set in Turkey. Along with other major steps which should be taken to put an acceptable energy policy into effect, it is essential to fix prices, thereby channelling consumption into beneficial directions .

I. ELECTRICITY

a. THE PRESENT SITUATION

Electricity is one of the secondary types of power, perhaps the most important one of them all. It enables full utilization of other types of energy sources and renders possible the application of power to various kinds of production methods and procedures.

Not everyone in Turkey, however, benefits from this type of energy. At present only 670 cities, towns and villages enjoy electricity. The combined population of these cities, towns and villages stands at 8.5 million, which means that only about 31 per cent of Turkey's population uses electricity.

Until 1948 only isolated and generally small generating plants produced electricity. It was only after the year 1948 that regional generating plants and interconnecting systems were started. Today, only in North-West Anatolia, Western Anatolia and the Çukurova region such systems are in operation. Apart from these, medium-sized hydro-electric power generators are in use in some regions.

In Turkey, unlike other European countries, there is no nation-wide interconnected system. The situation varies from one town to another where power may be drawn from independent generating plants or from regional systems. While excess capacity is in existence in certain places, in others - due to various reasons - energy may have been restricted.

Turkey's electricity requirements were for the most part met by thermo-electric power generators until the existing regional systems were constructed. Hydro-electric sources were used but little. Hydro-electric generators came into use to a significant extent only after the opening of the Seyhan Hydro-electric power plant in 1956. However, it must be pointed out that at the moment only about 800 million Kwh. are being utilized out of a potential hydro-electric capacity of 90 billion Kwh.

CAPACITY OF THE EXISTING PLANTS

	TERMO ELECTRIC		HYDRO ELECTRIC		TOTAL	
Years	Power MW	Energy 10^6 kwh	Power MW	Energy 10^6 kwh	Power MW	Energy 10^6 kwh
1955	575	1 935	37	130	612	2 065
1956	732	2 755	154	815	886	3 570
1957	777	2 983	162	825	939	3 808
1958	809	3 037	221	990	1 030	4 027
1959	843	3 101	318	1 138	1 161	4 239
1960	854	3 122	406	1 745	1 260	4 867

Auto-productive plants, which directly furnish the energy requirements of industry, account for 261 MW of the total power generated by the above plants.

The table below shows Turkey's consumption and generation of electricity (in million Kwh).

Years	Private Consumption	Public Bldgs.	Street Illumination	Industry	Transport and Communications	Loss and Internal Consumption	Gross Generation
1955	250	37	48	992	20	233	1 580
1956	278	37	53	1 142	34	275	1 819
1957	319	50	57	1 296	36	299	2 057
1958	359	55	63	1 446	39	342	2 303
1959	407	60	70	1 593	41	380	2 587
1960	465	67	78	1 778	49	456	2 886

A brief glance at the two tables above might lead one to the conclusion that in Turkey there is excess capacity in energy generation. A closer study of the matter, however, will prove such a conclusion to be misleading. For example, there is a shortage of energy in the Çukurova region, where 3 per cent of Turkey's total electricity production is consumed. On the other hand, the increasing demand for electricity in the North West Anatolia region, which consumes 73 per cent of the total electricity produced may be met by the existing generating plants only for another year or two. Therefore, without considering the nature of the problem, the state of the reserve demand, and the existing distribution, one should not jump to the conclusion that there is an excess capacity. Furthermore, improvements in the distribution system will expand the demand for electricity.

b. ESTIMATES FOR 1962

The average annual rise in the consumption of electricity since 1950 has been 13.5 per cent. Amount of energy and peak power consumed in 1960 stood at 2886 Kwh and 650 MW respectively.

As a result of surveys made by the State Planning Organization, the 1962 demand for power and energy is expected to be as follows :

	Peak Power MW	Energy 10^6 kwh
North-West Anatolia System	400	2 250
Western Anatolia System	80	380
The Çukurova System	41	215
Total for all of Turkey	740	3 700

The production of energy may be broken down as follows in terms of the primary sources of energy:

Hydro-electric	:	1 600 million kwh.
Thermo-electric	:	2 100 million kwh.
TOTAL		3 700 million kwh.

Regional demands for energy will be met as follows :

	North-West Anatolia	Western Anatolia	The Çukurova System	Other Places	TOTAL
Power of installed plants (MW)	537.7	229.2	59.2	520.6	1 346.7
Available power (MW)	511.5	201.6	40	518.7	1 271.8
1962 peak power demand (MW)	400	80	41	219.0	740
Operating reserve (MW)	45	23	20	140.0	
Total demand (MW)	445	103	61	359.0	
Excess power (MW)	66.5	98.6	-21	169.7	
Installed reliable energy (10^6 kwh)	2 693	719	170		
1962 energy demand (10^6 kwh)	2 250	380	215	855	3 700
Excess energy (10^6 kwh)	443	339	-45		

c. PROBLEMS

When the demand and supply conditions of various networks are studied, it will be seen that there is an acute shortage of energy supply in the Çukurova System and the North-Western Anatolia Region has long-term problems which require immediate attention. The measures recommended for these problems are to be found in the section entitled " Suggestions and Recommemdations " .

The Western Anatolia System poses no serious problem for the time being, especially after its integration with Nort-West Anatolia. The Western Anatolian System will be dealt with in the long-term plan.

In the regions outside the interconnected systems, particularly in Eastern Anatolia, it will be necessary to construct independent power generating units. In the course of 1962, work will start in this region on four new hydro-electric plants (Igdir-Kiti, Van-Engil, Nusaybin-Çağçağ, Bitlis-Baykan). Providing electricity in the regions where it is presently unavailable and expanding the inadequate plants emerge as problems which will require attention in the near future.

Extensive confusion and an acute lack of coordination are uppermost among electrification problems. Numerous organizations perform identical tasks independent of one another. (See chart on the following page .) Due to such duplications electrification work is conducted in an unplanned and uncoordinated fashion. This in turn gives rise to excess capacity in certain regions and shortage of supply in others. Moreover, scattered and uncoordinated efforts lead to unnecessary and undesirable conflicts, duplication and wastage of resources and manpower among various agencies and organizations,

4, SUGGESTIONS AND RECOMMENDATIONS.

(1) To eliminate the above-mentioned power shortage in the Çukurova region, the third section of the Seyhan Hydroelectric power plant should be completed as soon as possible. It will also be necessary to initiate a new power plant in order to end the power supply problem in this region.

(2) The North West Anatolian System will meet the demand of this region in 1962. The present surplus however, is only 450 million Kwh. and 66.5 M.W. This system, drawing upon power available from the Western Anatolian system and after being linked with the Bursa - Balikesir interconnected line where power generation will start in 1963, will meet the demand but for another year or two. Therefore, an additional power plant will be needed by 1964 at the latest. Work on such a plant should start in 1962 and attempts must be made to obtain the necessary foreign aid, because the construction of a generating plant normally takes at least 3 years.

(3) Electrification of the regions outside the interconnected system should be continued.

(4) Diesel generating plants, which in many places remained idle after being linked to interconnected systems, should be transferred to those regions where no power generation facilities exist. This will obviate extensive investments.

(5) Special attention should be attached to low and medium voltage systems which are lacking in our country. The elimination of bottlenecks arising from their absence will contribute to a better utilization of the existing capacity.

(6) Activities undertaken so far to remove the confusion in the field of electric power have yielded no results. In 1962 definite results must be attained in this respect .

(7) Small and medium sized generating plants established at different times should be provided with able technicians and technical aid.

AGENCIES AND ACTIVITIES CONNECTED WITH ELECTRICITY

ACTIVITIES	Agencies functioning in the field of Electric Power Ministry of Industry					Ministry of Public Work	Ministry of Reconstruction and Settlement		Others		
	En.Da.Reis.	E.İ.E. İdaresi	M.T.A.Enstitüsü	Etibank	E.Elek.İş.Mües.	D.S.İ.	İmar İsk.Pl.D.	İller Bankası	Belediye İşlet.	Diğer Dev.Mües.	Hususi teşebbüs
SURVEYS :											
a.Power resources survey		x	x			x					
b.Power market study	x	x			x	x					
c.Network analysis	x	x		x							
d.Efficiency studies	x	x			x						
e.Statistics	x	x									
f.Survey of training problems		x									
PLANNING :											
a.Production Planning	x	x		x		x					
b.Supply planning	x	x		x		x					
c.Determination of priorities	x	x									
d.Rural electrification		x			x						
PROJECTS :											
a.Dam and hydro-electric plants		x				x		x			
b.Thermal plants											
c.Diesel "								x	x	x	x
d.Transmission lines		x		x		x		x			
e.Substations		x		x		x		x	x		
f.Distribution systems		x						x	x		x
g.Rural Electrification		x			x			x			
h.Project approval	x						x				
INSTALLATIONS :											
a.Dam and hydro-electric plants				x		x		x			
b.Thermal plants				x					x	x	x
c.Diesel plants								x	x	x	x
d.Transmission lines						x		x	x		x
e.Substations				x		x		x	x		
f.Distribution systems								x	x		
g.Rural electrification								x			
h.Project approval					x						
OPERATIONS :											
a.Hydro-electric plants					x		x		x	x	x
b.Thermal plants				x	x				x	x	x
c.Diesel plants									x		x
d.Interconnected systems					x						
e.Rural electrification									x		x

See the notes on the following page

COORDINATION AMONG AGENCIES

Continued from page 45.

En.Da.Reis. : Department of Power

E.I.E.Idaresi : Electrical Resources Survey Division

M.T.A.Enstitüsü : Mineral Prospecting and Exploration Institute

Etibank : Etibank

E.Elek.Iş.Mües. : Etibank Electrical Works Division

D.S.I. : State Hydraulic Works

Imar Isk.PL.D. : Ministry of Reconstruction and Settlement : Planning Office

Iller Bankası : Bank of Municipalities

Belediye Işlet. : Individual Municipal Agencies

Diğer Devlet Mües. : Other State Organizations

Hususi Teşebbüs : Private Sector

(8) Preliminary studies show that a large part of Turkey's electricity requirements will have to be satisfied by harnessing the abundant hydro-electric power sources in the Euphrates and Tigris region. However, so far no consturctive proposal has been put forward subsequent to these studies . Therefore, it is essential to map out the development of the Tigris and Euphrates basin , determine the different potentialities in a unified fashion, and embark upon project preparations in 1962.

II. COAL

a. THE PRESENT SITUATION

(1) For many years the energy needs of industry in Turkey have been met with coal. The energy demands of rail and sea transport services, of industry, and of the urban population have been largely provided by coal.

Although Turkey's coal reserves are not large by world standards, they are adequate for present and probable future needs. More than 1,300,000,000 tons of known and prospective reserves of coal exist in the Zonguldak Basin while lignite reserves amount to billions of tons dispersed over various parts of the country.

At present all of Turkey's coal and coal products (except briquettes) and two thirds of its lignite are produced by the State Economic Enterprises. (For data on production and stocks see Table 5 a.)

(2) The price of coal produced by the State Economic Enterprises is set by the Ministry of Industry. Thus the producing agencies of the government have no voice whatsoever in the selling prices. Although a small amount of coal briquettes is produced by the private sector, prices are fixed in the same way. Prices are set on the basis of 14 % ash and a specified amount of moisture. Since the prices are subsidized, they are below cost.

Although the price of lignite produced by the State Economic Enterprises is controlled by the Ministry of Industry, there is a small margin of profit.

Prices of lignite produced by the private sector are free from control. However, low and subsidized prices of lignite produced by the State Enterprises effect the prices of the private sector.

Selling prices of the Coal Sales and Distribution Agency are given below for 1960 and 1961:

COAL

Type of Coal	Price
Lump	134
18-50	118
10-18	114
6-10	108
0-10	101
0-6	88
0-50	56
Mixed	50
Slimes	15
Raw Coal	97

COKE, BRIQUETTES

Type	Price
E.K.I. Coke	101,65
Karabük Coke	98,75
Gasworks Coke	
- Ankara	177.15
- Istanbul	185.65
- Izmir	205.55
E.K.I. Briquette	103.00
Ankara Briquette	-
Çengelköy Briquette	-

LIGNITE :

Type	Soma TL / Ton	Degirmisaz TL/Ton	Tunçbilek TL/Ton
+50	61	79	62
18-50	59	75	61
10-18	58	71	59
0-18	-	65	52
0-10	50	-	-
0-05	20	-	-
0-30 Raw Coal	-	-	29
0-18 "	34	-	-

Average sales cost and selling prices for 1960 (by types of coal) of the producing enterprises and of the Coal Sales and Distribution Agency are shown below :

TYPE TL/Ton		Average Sales Cost TL/Ton	Average Selling Price TL/Ton	Difference TL/Ton Profit	Loss
COAL	E.K.I.	107,94	104,91	-	3,03
	A.K.I.	124,54	112,46	-	12,08
	K.S.T.	113,02	111,33	-	
LIGNITE	G.L.I.	37,40	52,71	15,31	-
	K.S.T.	60,37	58,77	-	1,60
COKE	E.K.I.	153,73	101,65	-	52,08
	Karabük	132,81	97,22	-	35,59
	K.S.T.	143,16	167,08	23,92	-
BRIQUETTES	E.K.I.	125,24	103,00	-	22,24
	K.S.T.	108,82	112,04	3,22	-

Note : Karabük 1959

As a result of sales made in accordance with the cost and the selling prices shown in the above Table, losses incurred in the 1960 Coal Sales came to the following amounts :

Enterprise	Loss (In TL)	Profit
E.K.I.	18,326,261.00	-
A.K.I.	3,677,574.00	-
Karabük D.Ç.I. 1959	9,410,069.00	-
K.S.T.	-	2,487,112.00

Although the Coal Sales and Distribution Agency realized a profit of approximately TL 2,500,000.00 from its coal sales, the ratio of this profit to the general coal sales cost is approximately 4 % and the losses of the sales organization on coal and lignite sales are offset partially by profits from coke sales.

b. ESTIMATES FOR 1962

(1) Taking into account the 1960 consumption and the tendency to use oil products instead of coal, demand for coal in 1962 is forecast as 3,870,000 tons, which may vary from 3,685,900 tons to 4,055,000 tons. Production is expected to meet the demand.

(2) The demand for lignite in 1962 is estimated to be between 2,650,000 tons and 2,700,000 tons. Production will meet the demand.

(3) Coke, Briquettes and Coal-gas :

Consumption of coke and briquettes in 1962 is estimated to be 940,000 and 150,000 tons respectively.

The demand for coal-gas in 1962 is forecast as 110,000,000 m^3.

c. PROBLEMS, SUGGESTIONS AND RECOMMENDATIONS

(1) The financial structure of state coal enterprises needs to be improved. Their capital and financing requirements must be met as soon as possible. The practice of " sales at a loss " should be abandoned; this may serve as the most realistic and effective way of strengthening their financial structure. However, this will entail a raise in coal prices to a level where they will meet the costs.

In this way, the sales losses that are absorbed and met by the Treasury may be transformed into funds available for investment purposes.

(2) Turkish Coal Production Agency and related establishments can fulfill their functions and maintain their current production level with a more limited staff provided that there can be an effective distribution of personnel. If this reduction in personnel can be effected, it may result in a decrease in cost-prices of coal to the current level of coal sale prices. In order to realize this, full authorization must be given to the executives of the Agency.

(3) Turkey's lignite reserves add up to substantial amounts in various parts of the country. In order to prevent the destruction of forests, assure the use of normal animal waste for the most suitable purposes, to make use of low-calorie coals in thermo-electric power plants and in chemical industries related to coal, it is essential to utilize this underground wealth which requires less investment for production than coal. Consequently, measures must be taken to increase lignite production.

TABLE 5

COAL (SALEABLE, MIXED)

(tons)

YEARS	PRODUCTION	STOCKS	CONSUMPTION	EXPORTS
1955	3,500,219	31,309	3,539,310	-
1956	3,716,886	62,792	3,685,403	-
1957	4,013,677	176,597	3,899,872	-
1958	4,087,377	418,173	3,845,801	-
1959	3,950,215	508,577	3,855,867	3,944
1960	3,660,882	225,514	3,913,409	30,802
1961	3,737,000	-	-	
Program 1961 (6 months)	1,679,087	-	1,772,000	

PRODUCTION AND STOCKS

a. Lignite ('. '00 Tons)

YEARS	Production Saleable			Yearend Stocks			Consumption		TOTAL
							Sales		
	State	Private sector Raw Coal	Total	State	Private Sector (Stock and losses)	Internal Consumption (State)	State	Private	
1955	1,174	611	1,785	106	97	58	1,061	572	1,691
1956	1,327	942	2,268	113	97	68	1,292	942	2,301
1957	1,722	1,121	2,833	105	10	47	1,674	1,108	2,829
1958	1,725	1,218	2,943	56	119	37	1,725	1,210	2,972
1959	1,644	1,175	2,819	33	195	31	1,621	1,098	2,750
1960	1,698	1,141	2,839	83	195	23	1,625	1,141	2,789

Note : 1. Exclusive of the stocks of the Turkish Coal Sales and Distribution Agency.

2. The State Sector shows losses and has surpluses.

b. Coke and Briquettes (1 000 Tons)

YEARS	COKE			BRIQUETTES				
				PRODUCTION			Stocks	Consumption
	Producti.	Stocks	Consump.	State	Private	Total		
1955	694	24	670	103	4	107	-	110
1956	711	3	731	81	7	88	1	87
1957	739	11	732	70	9	79	3	78
1958	742	8	745	116	9	123	5	123
1959	743	6	745	128	7	135	5	135
1960	761	11	755	142	9	151	66	150
1961	-							
Programi	752,530	-	-	132	10	142	-	-

III. PETROLEUM

a. THE PRESENT SITUATION

(1) Explorations and Drillings

Turkey may be divided into 4 sections for the purpose of petroleum prospecting :

- Favorable	121,688 m^2
- Moderately favorable	164,565 m^2
- Less favorable or Medium	388,950 m^2
- Definitely not favorable	95,660 m^2

Until 1954, petroleum explorations in Turkey were conducted by the " Mineral Research and Prospecting Institute" (Maden Tetkik ve Arama Enstitusu) . At present private capital and foreign capital are also engaged in explorations . Data on explorations, drillings and crude oil production starting in 1956 - 60, after the passage of Law 6326, appear below :

Explorations and Drillings :	1956	1957	1958	1959	1960
Explorations-Geological(Km^2)	71,956	115,594	153,280	228,257	67,136
Explorations Geophysical Gravity(Km^2)	30,266	45,041	13,860	24,095	8,697
Seismic(Km^2)	1,007	2,926	5,279	4,390	1,743
Drillings (in meters)	19,087	24,146	47,757	60,680	66,338
Exploration and Drilling Investments (1,000 TL.)	21,392	48,496	112,066	180,983	163,210
Crude Oil (Ton)	305,616	298,139	328,543	389,627	375,172

The area covered annually by exploration licenses is as follows :

Years	Number of Licenses	Area (Km^2)
1955	14	6,678
1956	164	75,482
1957	200	92,762
1958	236	107,335
1959	242	109,343
1960	200	91,734
1961 (Sept.30)	139	62,508

The Petroleum Law, divides Turkey into 9 exploration regions. Regions 3 and 4 are partly closed to prospecting at the present. In the remaining 7 regions, the area covered by exploration licenses was 10,934,300 hectars. in 1959. However, the existing sedimentary basins add up to about 38,000,000 hectars. Thus an additional 27,000,000 hectars may show some promise.

There has been a decline in the number of exploration licenses in the past two years. This is due less to lessening of interest on the part of exploration companies than the difficulties encountered in fulfilling certain obligations set up by the Petroleum Law in terms of the dates of issuance of exploration licenses.

Petroleum explorations have been effective and beneficial in the past two years. In addition to the operations of the Turkish Petroleum Corporation (Türkiye Petrolleri A.O.), Petroleum has been obtained from wells in the Kayaköy and Bulgurdağ areas.

(2) Production and Imports :

(a) Crude Oil

Annual Crude oil production has been as follows :

Years	Ton
1956	305,616
1957	298,139
1958	328,543
1959	389,627
1960	375,172

Inasmuch as the Batman Refinery was the only refinery in operation during the above period, no crude oil was imported for refining purposes. Crude oil capacities of the refineries recently completed amount to a total of 4,200,000 tons. Assuming that Turkey's crude oil production will remain the same while the new refineries are about to start operating at their full capacities, future crude oil imports will be an estimated 3,490,000 tons. This amount will reach approximately 2,260,000 tons in 1962, and it will require $ 30,000,000 in foreign exchange.

(b) Petroleum Products

Production and imports of such petroleum products as fuels, lubricants and asphalt have been as follows :

Production and Imports of Petroleum Products (x) (In tons)

Year	1955	1956	1957	1958	1959	1960
asoline						
mports	292,728	225,671	269,915	196,495	425,354	357,524
roduction	4,109	52,153	62,666	66,424	75,302	71,958
otal	296,837	277,824	332,581	262,919	500,656	429,482
erosene						
mports	233,290	204,340	254,472	213,833	380,236	303,148
roduction	-	-	-	-	-	8,371
otal	233,290	204,840	254,472	213,833	380,236	311,519
esel Oil						
mports	354,294	300,742	442,104	360,394	629,501	491,222
roduction	5,747	17,870	15,630	23,849	34,914	24,579
otal	360,041	318,612	457,734	384,243	664,415	515,001
el Oil						
mports	24,750	27,470	25,993	19,145	37,137	45,208
roduction	52,258	165,896	157,416	169,037	179,600	182,468
otal	77,008	193,366	183,409	188,182	216,737	227,676
rand Total	967,176	994,642	1,228,196	1,049,[illegible]	1,762,044	1,484,478
ubricants						
mports	51,605	43,999	58,258	70,235	70,723	48,397
sphalt						
roduction	12,728	39,255	36,225	43,503	46,574	37,724
mports (xx)	12,367	1,054	326	124	2,255	3,358

(x) Imports for military uses excluded

(xx) Natural asphalt, tar, pitch included

The new refineries, once in operation, will modify the composition of Turkey's petroleum imports in 1962. In lieu of the previously mentioned items, crude oil and lubricants will be imported.

The production of the newly established refineries is estimated to replace about $ 42,000,000 worth of petroleum imports in 1962.

(3) Capacity

(a) Crude Oil :

Until the expansion of the Batman refinery, the capacity of the crude oil wells will be held commensurate with the production capacity of the refineries. The expansion of the above refinery will be completed by the end of 1961 and at that time the capacity of the wells will be raised to 600,000 tons. Annual production of wells in Bulğurdağ and Kayaköy is around 252,000 tons.

(b) Refineries :

(i) Design capacity :

The design capacities of the refineries are shown in the following table :

Design Capacities of Refineries (in 1000 tons)

	Batman	Izmit	Mersin	Total
Crude oil to be refined	580	1,000	3,200	4,780
Gasoline products	100	262	600	962
Kerosene	15	100	300	415
Diesel fuel	50	208	825	1,083
Fuel Oil	275	373	1,200	1,848
Asphalt	80	-	-	80
Jet Fuel	-	-	100	100
Liquified Petroleum Gas	-	20	-	20
TOTAL	520	963	3,025	4,508

(ii) Capacity in 1962 :

The new refineries are not expected to function at full capacity in 1962, their first year of operations. As shown in the above production table, petroleum products imported and produced at the Batman refinery add up to a total of 1,484,478 tons in 1960 excluding asphalt. The combined product capacities of the new refineries and the Batman ferinery is around 4,500,000 tons. Not more than an estimated 60-65 % of the existing capacity will be utilized in the initial years due to limited demand. Since all distributing companies in Turkey except Petrol Ofis are founders or shareholders of the Mersin refinery, it is natural that they will show little interest in marketing the products of the Izmit and Batman refineries. As far as its organization and sales capacity are concerned, Petrol Ofis, which serves as the present distribution agency of the Izmit and Batman refineries representing the public sector, is incapable of performing this function.

Under these circumstances, it is not expected that the new refineries will utilize their full design capacities for another four or five years after 1962.

b. CONSUMPTION ESTIMATES FOR 1962

Total consumption of fuel products is estimated at 1,700,000 tons, based upon the assumption that economic trends in 1962 will gain momentum.

c. PROBLEMS

(1) As mentioned previously, a limited demand for petroleum products is forecast for the period 1962-1966. A survey of consumption trends in the past years reveals increases in such products as kerosene and diesel fuel. No appreciable change in this trend is expected in 1962. On the other hand, due to certain limitations in refining operations, quantities and types of petroleum products obtained from crude oil cannot be changed according to needs. Therefore, in order to satisfy Turkey's future demand for fuels, refineries must produce more fuel-oil than can be consumed. In the next 5 years there will be a steadily decreasing excess capacity particularly in fuel oil.

(2) Petroleum is a product that reaches the consumer through a series of such operations as exploration, drilling, production, refining, distribution and sales. These operations cannot be studied as separate units. There must be full coordination between production units and sales units in order to maintain normal production and fulfill the conditions of the market in terms of production, quantity , quality and prices. The private capital functioning in the petroleum industry is organized according to such principles. Production units established with the participation of the public sector (Batman and Izmit refineries, in particular) have no coordination with the Petrol Ofis which serves as the Government's sales organ. However, given its legal status, financial structure, present sales capacity and existing installations and facilities, the Petrol Ofis will be incapable of fulfilling its marketing functions at a time when new refineries go into operation. If measures are not adopted to ameliorate the above conditions in the coming years, the disparity between the level of consumption and production capacity may bring about considerably deleterious effects on the Batman and Izmit refineries.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) Presently available domestic crude oil is considerably less than the amount that will be processed by the newly established refineries. Since this need will be met by imports, it is essential to accelerate the crude oil explorations in order to save on foreign exchange.

(2) In the coming years, larger quantities of petroleum products, particularly fuel oil, will be produced than may be consumed. Therefore, export possibilities must be explored for marketing purposes. Furthermore, in order to utilise the fuel oil surplus, measures must be taken to have the existing and new industrial plants and big cities use fuel oil for purposes of energy and heating. Actually, after the second Iron and Steel industry goes into operation, the metallurgical industry will be operated by coal, and the power needs of other industries will be met largely by fuel oil.

(3) The marketing of the products of the Batman and Izmit refineries will to a large extent depends upon the establishment of a well-organised and effective marketing agency. Therefore, immediate action must be taken to unify all the major functions (exploration, production, refining, sales and distribution) connected with government-owned petroleum under a single authority.

(4) Surveys must be made for establishing heavy chemical industries in the vicinity of the refineries.

2. THE IRON AND STEEL INDUSTRY

a. THE PRESENT SITUATION

1. Production

The only integrated iron and steel installation in Turkey today is at Karabük. The General Directorate of Iron and Steel Industries of Turkey, a state enterprise hereafter referred to as Karabük, accounts for an important percentage of Turkey's domestic production and its output plays a dominant part in the price and production equilibrium of the present iron and steel market. Although in recent years there has been a noteworthy increase in the actual output of the private sector, Karabük's role has lost none of its importance. The following figures (in thousand of tons) adequately explain this situation.

Years	Karabük	Private Sector	Imports	Total	Karabük % of Total	Karabük % of domestic production
1956	150	43	189	382	39	78
1957	146	48	111	305	47	75
1958	132	48	94	274	48	73
1959	165	58	241	464	35	74
1960	215	75	280	570	38	74
1961	260	94	218	572	45	73

2. Capacity

The Karabük installation was originally established with an annual capacity of 300,000 tons of pig iron. In 1953 a maj expansion program was prepared. It is hoped that this extension, the implementation of which was delayed because of bad financial planning, will be completed next year and produce 600,000 tons of pig iron and from this 650,000 tons of steel annually. Assuming that the continuous rolling mill is not completed before 1963, it is expected that production capacity for rolled products will be 270,000 tons for 1962 and 480,000 tons for 1963.

3. Demand

In Table 1 Consumption figures are given by types of products from 1950 to 1961. It may be observed that in the period 1950-1959 because of import difficulties there was excess demand whereas in the current year there is a shortfall in demand.

Table 1

IRON AND STEEL CONSUMPTION IN TURKEY 1950-1961 (1)

(1,000 tons)

Product	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961 (x)
Light Structural Profiles	89	94	135	203	130	193	130	110	105	180	220	222
Heavy " "	13	12	30	54	52	20	23	18	25	41	50	50
Railroad supplies	78	37	18	41	5	30	19	10	18	30	37	37
Construction Steel	-	7	10	18	13	3	12	4	7	11	14	14
Wire	5	1	1	1	1	-	6	4	3	4	6	6
Sheet	25	22	34	36	26	29	30	30	27	44	54	54
Plate	11	10	14	22	14	11	7	12	12	21	26	26
Strip	3	13	13	14	14	2	6	-	7	11	14	14
Tin Plate	15	9	22	39	27	20	18	16	16	28	33	33
Pipe	11	15	15	24	16	49	41	18	19	31	40	40
Cast Pipe	28	30	31	30	34	23	30	30	25	41	50	50
Semi - Manufactured products for sale	-	5	2	-	-	12	14	17	8	14	18	18
Others	-	-	-	-	-	5	6	5	2	7	8	8
TOTAL	278	225	325	482	332	397	342	274	273	463	570	572

(x) . Estimate of annual consumption is based on the situation in September 1961.

(1) . 1959,1960 and 1961 figures represent quantities sold rather than actual consumption. The breakdown for those years has been determined by means of projection.

b. ESTIMATES FOR 1962

If Turkey's iron and steel consumption over the past ten years is analyzed, it becomes readily apparent that consumption did not follow a regular pattern and that, while production increased steadily and regularly, the major fluctuations in imports had a significant influence on the result. As a matter of fact, domestic production, which was in the neighborhood of 120,000 tons in 1951, rose to 350,000 tons in 1961 and during the period of this increase followed a fairly linear curve. However, import limitations restricted consumption totals to a great extent and virtually imposed their irregular character (Table 1.). From this point of view, the years of trade liberalization between 1951 and 1953 and the years of foreign exchange scarcity between 1953 and 1958 do not by any means give a reliable idea about iron and steel consumption.

The 1962 iron and steel consumption is estimated to be in the neighborhood of 550,000 tons assuming that a major portion of the Karabük extension will be completed in 1962 and that no significant difficulties will affect imports.

The second integrated heavy industry center which is being established at Eregli will enter its first stage of production in 1964. The first-stage annual capacity of the installation will be 265,000 tons of rolled products and 110,000 ton of steel ingots.

c. PROBLEMS

Among the critical problems of the sector the most important in the current year is the disequilibrium between supply and demand. At present there is a 70,000 ton stock on hand at Karabük, exclusive of pig, ingot, and sheet-plate stocks to be used in manufacturing. This has resulted entirely from the increase in rolled products in 1960 and 1961 compared with the previous years. As a matter of fact, the enterprise has recently commenced sales on credit and reduced prices in order to liquidate this abnormal stock. Although these sales will have a positive effect on the situation, it is probable that there will be a 60,000 ton stock carryover into 1962.

The same sales difficulties exist for the private sector. This excess of supply, however, is temporary, and it should be expected that in 1962 demand will reach the level of supply. There are various reasons for the sales difficulties observed in 1961.

Turkey's import policy also has a great effect on this matter. The preference for goods of foreign origin over domestic products of sufficient quantity and satisfactory quality plays an important role in the accumulation of aforementioned stocks. It is essential to handle this matter with greater care in the quotas.

d. SUGGESTIONS AND RECOMMENDATIONS

1. In the marketing of Karabük's products, it will be useful to try to expand sales in the internal market by means of active sales efforts.

2. It is necessary to act more carefully on iron and steel products in section 73 of the quotas and to obviate the import of products which can be produced domestically in adequate quantity and quality.

3. It is advisable to eliminate imports by meeting the demand for contruction steel from the production of the Kırıkkale Steel Plant.

4. The possibility of price reductions should be sought on products used in industry.

3. CEMENT

a. PRESENT SITUATION

The guaranteed installed capacity of the 15 cement factories now in operation in Turkey and the regional distribution of 1960 production are given in Table 1.

TABLE : 1

GUARANTEED CAPACITY OF CEMENT FACTORIES

	Annual Guaranteed Capacity	
Ankara	120,000	tons
Sivas	200,000	"
Adana	150,000	"
Afyon	85,000	"
Balıkesir	85,000	"
Çorum	85,000	"
Elazığ	85,000	"

Pınarhisar	85,000	tons
Dırıca	300,000	"
Kartal	240,000	"
Zeytinburnu	220,000	"
Eskişehir	150,000	"
İzmir	150,000	"
Gaziantep	85,000	"
Tarsus	3,000	"
Total....	2,043,000	"

The capacity figures listed above for the factories are those given by the manufacturers of machinery and equipment. These plants can operate economically at 25% above this rated capacity. The degree to which plant capacity has been utilized is shown by the comparative figures (see Table 2) of actual cement production since 1957 in existing plants and the maximum attainable with the same equipment.

It is apparent from a study of Table 2 that in 1960 the plants, taken collectively, worked at 4% above their guaranteed capacity. In terms of the location of existing plants and plants now being established, there is a concentration in some regions, especially in the East, and there is no plant beyond Sivas and Elazığ. For this reason transportation costs are almost as much as the cost of the cement. If we make a regional classification according to where the plants are located, we obtain the following picture (Table 3).

b. Estimates For 1962

1. Significant Investments in 1962 and production estimates

At present four cement mills are under construction or waiting for power to be brought in. The equipment and machinery of a fifth mill have been waiting at the port of İskenderun. The location of this mill was to have been in Çanakkale, but studies are being made at present for another location. Three of these five mills will enter production at half of their capacity in 1962 thereby assuring a 295,000 ton increase in production for 1962. It is also expected that 50,000 tons of additional output can be obtained by better utilization of existing plants. Taking into account this increase, the 1962 estimated production will be 2,400,000 tons without making any further additions to the plants.

TABLE 2

PRODUCTION AND PLANT UTILIZATION BY YEARS

Year	Guaranteed Capacity 1000 Tons	Production 1000 Tons	Consumption 1000 Tons	Degree of Utilization
1949	395	375,5	401,8	0,95
1950	395	395,6	530,5	1.00
1951	395	396,3	639,6	1.01
1952	495	459,1	848,5	0.92
1953	645	530,9	1067,7	0.82
1954	1,010	703,3	1332,0	0.70
1955	1,010	819,3	1629,9	0.81
1956	1,195	970,1	1263,3	0.81
1957	1,700	1261,2	1539,9	0.74
1958	1,877	1516,5	1513,9	0.80
1959	1,962	1734,1	1749,9	0,88
1960	1,962	2037,8	1949,3	1.04

Turkey's cement consumption has shown an increase by 10-year periods as follows:

(Tons)

1930	1940	1950	1960
188,000	375,000	957,000	1,971,000

This corresponds to an annual increase of about 10% and is parallel to the increase in investment for construction.

Although the investment in construction did not show a noticable increase in 1961 compared to recent years, there was a cement shortage in some parts of the country; this was due to the fact that several cement mills had decreased their production in 1961.

Since it is expected that investments in 1962 will show an increase compared to 1960, the demand for cement will also increase. The demand is estimated at 2,2-2,4 million tons.

Assuming that the new mills will enter production in the middle of the year, total production will just meet the demand.

c. SUGGESTIONS AND RECOMMENDATIONS

1. The Bartın and Söke mills should definitely enter production in the middle of 1960.

2. Price, profit and financing problems of this sector must be reviewed by the State Planning Organization, the Ministry of Industry, and the Cement Industry.

3. Projects for new mills or for the expansion of existing ones should be prepared with due regard to the demands of various regions, cost of cement transport, capacity of existing mills, and their costs.

4. An analysis should be made of whether or not the Balıkesir and Pınarhisar plants, which are of low capacity and are located in the Aegean and Marmara regions respectively, should be converted to the production of high-quality special cement, and the conversion project should be prepared by the Turkish Cement Industry Cooporation.

5. A research laboratory project should be designed so that the Turkish Cement Industry Corporation can pursue the development of ordinary Portland cement and special cements to meet nation-wide needs. Cement standards of the other enterprises should be controlled by this project. It should be borne in mind that only as a result of the realization of such a project and of the research conducted can production of white cement be undertaken.

TABLE 3

REGIONAL DISTRIBUTION OF PRODUCTION

Region	Plant	1960 Production (tons)
THRACE and MARMARA	Darıca	307 000
	Kartal	199 986
	Zeytinburnu	167 914
	Pınarhisar	98 738
BLACK SEA	Bartın	-
AEGEAN	İzmir	153 460
	Balıkesir	117 974
	Söke	-
CENTRAL ANATOLIA	Ankara	157 161
	Eskişehir	133 500
	Konya	-
	Afyon	124 867
	Çorum	111 246
SOUTHERN ANATOLIA	Adana	187 500
	Gaziantep	-
	Niğde	-
	Tarsus	4 318
EASTERN ANATOLIA	Sivas	164 207
	Elazığ	109 945
TOTAL		2 037 796

4. TRANSPORTATION AND COMMUNICATIONS SECTOR

1. TRANSPORTATION

a. General Situation

The transportation sector consists of four main systems: highways, railways, maritime transport, and airlines. Tables 1 and 2 show the transportation of goods and passengers by each system within the overall tranportation volume. It is clear from these Tables that the rate of increase of transportation by highway in higher than in the other systems. In other words, highways account for a major part of transportation.

With regard to the flow of domestic transportation, Turkey's significant transportation networks are highways and railways. Turkish highways and railways have not been built in such a way as to complement each other.

Transportation of goods as well as passengers by means of maritime tranpport has remained static.

Airline transportation has little significance. However, due to large investments made into this network primarily for passenger transportation facilities and because of continuous losses incurred by the Turkish Airlines, it becomes necessary to consider seriously the problems relating to transportation by air.

One problem common to all the systems (highways, railways, maritime transport, and airlines) with regard to the national economy is that heretofore transportation has not been considered as an interrelated network. The waste of resources caused by this attitude should be taken into consideration in programs to be devised in the future.

Generally, demand for transportation of goods is related to the increase in total national income, and demand for passenger transportation to the increase in per capita national income. Calculations show that the elasticity of the increase in goods transportation to the increase in national income is 1.2. However, the effects of the general demand for transportation on each transport network depends upon a variety of factors. Fluctuations in travel time and the tariffs in each system are factors in the development of demand for transportation within each system. Until now, the rate of increase in highway transportation facilities has been very high. Its elasticity has never dropped below 1.5, even in the years when highway transportation has been lowest. Conversely, even in the years when national income increased, railway and maritime transportation declined.

TABLE I

TRANSPORTATION OF GOODS

	Highways	Railways	Maritime Transport	Airlines
1956	2.661.617.010	4.823.059.619	-	3.000.000
1957	2.234.229.000	5.382.375.361	4.851.252.000	11.700.000
1958	2.419.363.000	5.530.652.982	3.915.653.000	15.348.000
1959	3.253.614.000	5.250.628.320	3.466.169.000	15.552.000
1960	3.678.434.000	4.634 971.322	4.827.326.000	14.880.000

NOTES : 1. Highways transportation figures represent transportation of goods on state and provincial highways only.

2. Figures pertain to the maritime transportation in the public sector (Maritime Bank)

3. Maritime transportation figures include international transportation, which accounts for a large percentage of the total.

4. Airline transportation includes international transportation.

5. Airline transportation figures include passenger ton-km from 1957.

TABLE : 2

PASSENGER TRANSPORTATION

Passenger / Km

	Highways	Railways	Maritime Transport	Airlines
1956	12.910.634.000	4.[illegible]80 208.039	.-	91.692.000
1957	8.905.097.000	5.040.603.512	492.777.000	130.260.000
1958	8.886.306.000	5.105.384.608	479.459.000	167.628.000
1959	9.969.241.000	4.588.825.918	443.944.000	165.384.000
1960	10.880.027.000	4.395.927.630	386.260.000	147.972.000

NOTES :

1. Highway transportation figures include transportation of passengers on state and provincial highways only.

2. Maritime transportation figures pertain to the public sector. Passenger transportation of the private sector is too limited to be of significance.

3. Maritime and airline transportation figures include international transportation.

In order to evaluate these factors better and determine the demand for transportation in terms of individual networks, it will be useful to analyze the networks separately. The four main networks will be surveyed individually, each in terms of goods and passenger transportation.

2. GOODS TRANSPORTATION

(a) HIGHWAYS

(i) Present Situation

Table 3 shows the different types of state and national highways as at the end of 1960.

TABLE 3

STATE AND NATIONAL HIGHWAYS AT THE END OF 1960

Highways	State Highways	Provincial Highways	Total
Stone-paved	104	52	156
Concrete	5	8	13
Concrete asphalt	211	5	216
Asphalt-paved	6027	637	6664
Stabilized	17083	13839	30922
Good Macadam	124	2162	2286
Bad Macadam	148	1634	1782
Graded Roads			
With Bridges	712	2123	3835
Without Bridges	449	4884	5333
Unimproved Roads			
Wagon Roads	769	7753	8522
Paths	1079	734	1813

Density of traffic varies on the roads. At present, 70% of the traffic is handled by a "main network" of 16,500 km. Within this main network, the İstanbul-Ankara Highway is one which bears the largest density of traffic. Vehicle counts show that the actual traffic on the two most crowded sections of this highway, is 1379 and 1131 per day.

However, the average daily capacity of the İstanbul-Ankara Highway is sufficent to handle 2750 vehicles. The actual traffic on the three most crowded checked sections of the Ankara-İzmir Highway, where traffic is also dense, is 305, 422 and 405 per day. Potential capacities of the same sections, however, are 3047, 2742, and 3047, respectively. The situation on Ankara-Konya Highways is not much different.

(ii) Problems

Above mentioned examples of three highways, where traffic is densest, show that very little use is being made of Turkey's highway capacity. This emerges more clearly when a comparison is made with actual transportation: With allowances made for such weather conditions as rain and snow, a total transportation of 23,096,860,000 ton kms. could have been made on the national highways in 1960. (This figure was computed without any regard for the types of vehicles.) Actual transportation, however, stood at 3,344,031,000 ton-kms., and the percentage of capacity actually used was 14%. Table 4 gives an idea about the density of traffic on some other highways.

TABLE 4
ACTUAL AND POTENTIAL CAPACITY ON SOME CHECKED SECTIONS

Checked Section	Actual (1960)	Potential Capacity	Percentage of Use
Maraş-Gölbaşi	118	2742	% 4.3
Gaziantep-Urfa	170	850	% 20.0
Diyarbakır-Mardin	133	3047	% 4.3
Aşkale-Erzurum	188	970	% 19.3
Erzurum-Horasan	224	2437	% 9.2
Ordu-Samsun	480	2742	% 17.5
Çorum-Sungurlu	173	2132	% 8.1
Aksaray-Ulukışla	201	2437	% 8.2
Silifke-Mersin	537	2742	% 19.5
Konya-Karapınar	252	3047	% 8.2
Cihanbayli-Konya	238	3046	% 7.8

Care must be exercised in calculating the percentage of use on the highways, because some highways may have been built for social and military purposes alone. However, the use of existing capacity will be found low even after allowances are made for such cases.

(aa) The foregoing indicates that most of the existing highways, have been built with little regard for needs and requirements in the near future. Since road construction involves large investments highways must be built with an eye to the traffic volume expected in 20 years. But this is only true of the main or "Skeletal" part of the highway system. Surfaces should be built with the near future in sight, but in such a way as to increase the number of lanes in the more distant future.

(bb) From the point of view of vehicles, the situation looks slightly different. Calculations based upon conservative assumptions show that the capacity of the national and state highways in 1960 was 5,781,625,000 ton-km. This corresponds to a rate of use of 63%. On the other hand, it is estimated that 8,000 additional trucks and station-wagons will be put into use in 1961. This will increase capacity to 6 billion ton-km.; but, should the present trends continue, goods transportation by highway in 1962 will reach a maximum of 4,250,000,000 ton-km.

The foregoing indicates that Turkey's available transportation facilities are not properly utilized. The reason lies in the following facts: Highway transportation is completely unorganized; there is uncontrolled and destructive competition is rampant; the volume of business is low.

(iii) Suggestions and Recommendation:

(aa) In order to end the disorderly condition of highway transportation, financial and administrative measures should be adopted to encourage the highway truckers to form groupings. While these measures are difficult to take, only if such an organization is set up can truckers attract more business and thereby increase their profits and prevent waste of national resources. Present capacity is adequate to meet demands or needs in the near future.

(bb) Taking domestic production into consideration, the types of vehicles that are most suitable Turkey's economic and natural conditions should be determined for import purposes.

(cc) The transportation tax should be extended to private transporters. Users of highways contribute very little to the financing of highway construction. The Highway Administration is in a highly developed state. Developments hereafter should be made parallel to the expansion of the sources of income stated in sections 2 and 4 of Article 9 Establishment of the Law relating to the and Functions of The General Directorate of Highways.

(dd) The foregoing proves that at present little use is made of highways. Therefore, extension of national highways and new highway construction should be undertaken only if economic surveys indicate a need for them. Density of traffic should be considered alongside the improvement of the standards of the existing highways.

(ee) While the main network is adequate to meet needs in the coming years, this does not apply to secondary roads. Greater emphasis should be placed on building provincial and village roads. Being relatively inexpensive to build, they permit the use of the villages' manpower and other types of participation. Priority should be given to those village roads in whose construction the villages take an active part.

(ff) In road construction, standards suitable for present conditions should be applied in favor of the highest the possible standards.

(gg) Due emphasis should be placed on traffic safety measures, and regulations relating to loading and transportation arrangements should be studied.

(b) RAILWAYS

(i) THE PRESENT SITUATION

While the capacity of railways in 1960 was 73 million gross ton-km, actual transportation was only 15 billion gross ton-km, which corresponds to a rate of use of about 20%. No detailed data are available on the technical condition of vehicles. It can be deduced from the available information that the Railways, with the present rolling stock, is capable of a total transportation of 10 billion net ton-km, which is twice the actual amount.

(ii) PROBLEMS

A definite decline has been evident in transportation by railways. This is due to the technical characteristics of railway transportation as well as to the growth of highway transportation. Railways are generally suitable for long-distance transportation. But, due to the growth of highway transportation, the appearance of high-tonnage trucks and of overloading because of excessive competition, transport of freight normally handled by railways has shifted to highways. A major cause of this switch has been the contruction of highways parallel to railways. In view of the foregoing, no large increase in railway transportation will occur in 1962.

(iii) SUGGESTIONS AND RECOMMENDATIONS

(aa) Except for railroads to be built in the near future for military defense purposes, no additions to railway capacity should be made unless they are of proven economic usefulness.

(bb) The major shortcoming of the Railway organization is its inefficient operational methods. It is especially necessary to rearrange railway schedules. This problem is closely related to the training of personnel to provide for an adequate number of qualified personnel who are urgently in need within the Organization.

(cc) Especially in administrative posts, there is more personnel than needed. Necessary reductions in staff should be made gradually.

(dd) The Railway Organization should review all of its schedules.

(ee) The Railway Organization should utilize its production and repair capacity to a greater extent. (See Machine and Tool Industry)

(c) MARITIME TRANSPORT

(i) THE PRESENT SITUATION

Private sector plays an important role in maritime transport and owns about 65% of Turkey's commercial fleet. Scanty data are available on this sector. Consequently, the analysis below depends mostly on data relating to the public sector.

Maritime transport is distinguished from other systems of goods transportation by certain characteristics. Salient among them is the fact that international transportation accounts for a substantial part of maritime transport. In 1960, maritime transport, including privately-owned vessels, amounted to an estimated 9-10 billion ton-km., of which only 0.4 billion was in coastal transportation.

However, in the same year, Turkey's trading vessels available for transportation of goods has a capacity of 550,000 Dw-tons, of which not more than 300,000 Dw-tons is suitable for international transportation. This leaves 250,000 Dw-tons available for domestic transportation. But according to estimates 100,000 Dw-tons would be adequate for coastal transportation. Even with the changes in 1961 taken into account, present capacity exceeds demand.

Ships operating in international lines yield profits while ships operating on coastal lines show no profits because of unused capacity.

(ii) PROBLEMS

Available data indicates a decline in sea transportation in recent years, as evinced both in foreign and domestic lines. In the last five years the percentage of Turkey's foreign trade volume transported by Turkish ships fell from 40% to 30%.

This trend is expected to continue in 1961 and 1962. If certain measures are taken for the liberation of foreign exchange on cargo transport payments, the present situation could be maintained at best. Due to limited information concerning the transport volume and characteristics of the private sector, it is very difficult to make any estimates. Sea transport capacity, however, may be considered sufficient.

(iii) SUGGESTIONS AND RECOMMENDATIONS

The number of ships operating on coastal lines exceeds the demand. Possibilities of developing coastal shipping through liquidation of old vessels must be sought. The commercial float operating in international lines must be expanded.

The Maritime Bank, which at present operates as a commercial bank, must be reorganized. Ship-owners must be induced by means of appropriate credit policies to buy newer and speedier ships.

(d) AIRWAYS

The Turkish Airways owns two C-47 cargo Planes of a total capacity of 2,737,000 ton km. The cargo-capacity of the passenger planes is sufficient for this purpose. Possibilities of using these two cargo planes for transportation of fresh fruits and vegetables should be explored.

(3) PASSENGER TRANSPORTATION

(a) HIGHWAYS

In 1960 the potential capacity of highways was twice that of actual transportation (21 million passenger - km). In the first 8 months of 1961, 953 cars and buses were imported. This capacity will be further expanded with the import of cars and buses in the last 4 months of 1961. Demand for passenger transportation is estimated at 13 billion passenger Km in 1962. This indicates that the utilization of highways is very low. Without any additions to existing capacity, it will be possible to meet prospective needs. The possibilities of improving the city passenger transportation must be studied.

(b) RAILWAYS AND MARITIME LINES

Similar problems beset transportation by railways and maritime lines. Furthermore, transportation of passengers in these two networks has shown definite decreases in the past years. In 1960 only 20% of available first class seats have been utilized in the railways. Maritime transportation of passengers (coastal and international) has not attained a large proportion. In fact it has declined in the last few years. There are numerous indications that existing capacity exceeds the needs.

(c) AIRWAYS

(1) Air transportation plays an important role in passenger transportation. According to experts, the number of existing airships exceeds Turkey's needs. Without taking into account the 10 F-27 airships imported in 1961, the rate of utilization (in 1960) stands at 19%. In the near future the demand cannot be expected to rise to a level which would justify such a capacity.

On the other hand, Turkish Airways incurs losses even in the most densely used domestic lines (Ankara-İstanbul). This may be explained by the fact that the number of flights are greater than needed. In these lines the ratio of passengers to available seats is considerably low.

Turkish Airways operates long and short distance flights abroad. Given the existing aircraft and demand, continuation of the short-distance flights is advisable. However, such long-distance flights as the Istanbul-Frankfurt run account for most of the losses because the Turkish airlines has to compete with foreign airways, their established names and prestige, and their innovations and developments.

(ii) Under these circumstances, the measures to be adopted in the field of air transport are as follows:

(aa) All schedules must be reexamined; if necessary, some must be dropped, and others unified. The number of flights must be reduced on some routes.

(bb) The organization of short-distance lines must be improved, and long-distance lines must definitely be discontinued. Landing rights at foreign airports could be leased to a foreign airways-system on a profit sharing basis.

(cc) The number of aircraft must be reduced beginning with the DC-3s. This curtailment must be coordinated with improvements in those airports which have landing facilities only for DC-3s.

(dd) Tariffs must be reviewed on a distance basis.

(ee) Management methods must be improved.

b. HARBORS AND PIERS

(1) THE PRESENT SITUATION

Along the Turkish coastline there are 11 ports and 57 piers which are regularly served by the ships of the Maritime Bank. Some of these harbors are run by the Maritime Bank and some by the State Railways. The Zonguldak, Ereğli and Kozlu harbors, on the other hand, are under the direction of coal enterprises, and the Istanbul harbor is operated jointly by the Maritime Bank and the State Railways.

(2) THE PROBLEMS

(a) The existing piers are run mostly by the local authorities. At most of the piers, ships anchor at same distance from the shore. Loading and unloading must therefore be done by means of lighters. This, of course, causes loss of time and money. Also unfavorable weather conditions sometimes prevent the ships from anchoring even at a distance from the shore. Therefore, normal sea transport is confined to certain months of the year.

The Black Sea piers are much too close to one another; therefore each pier has a limited hinterland. As a result, the volume of goods loaded and unloaded at each pier is declining; this limits port construction and installation of essential equipment.

(b) Existing ports are situated at points whose hinterlands are distinguishable from each other in terms of geographic conditions, transport facilities and economic characteristics. For example, the ports of Trabzon, Samsun, Istanbul, Izmir and Iskenderun have separate hinterlands which collectively cover the entire country. Not all these harbors, however, have links with their hinterlands nor are they well equipped to meet all requirements. In fact, many of them lack modern machinery and equipment. It is essential to eliminate such shortcomings as soon as possible. Emphasis must be placed on these particular harbors; before constructing new harbors, a study should be made of the existing harbors, the potential hinterlands of the new ports, and the services provided by the existing ones.

(c) Harbors and ports are operated by various different organizations. In one case, two separate authorities are responsible for the operation of a single port, i.e. Istanbul. This leads to confusion.

(d) Bottlenecks occur in certain ports not only because of inadequate facilities or lack of organization. Customs formalities which entail the storage of goods for a period of time contribute to delays.

(3) SUGGESTIONS AND RECOMMENDATIONS

(a) It is essential to rectify as soon as possible the deficiencies of the ports and their loading, unloading and storage facilities after determining the requirements on the basis of hinterland surveys.

(b) Piers should be developed according to the requirements of their hinterlands. Characteristics of the ships which regularly use these piers should also be borne in mind.

(d) The agencies or organizations responsible for the operation of the ports should be clearly defined, and duplications and overlaps in their functions should be eliminated.

c. AIRPORTS

(1) THE PRESENT SITUATION AND PROBLEMS

In Turkey there are 28 airports available to civil aviation, and various military airports. Some of the civil airports are operated by military authorities.

Only 9 airports have runways suitable for the use of Viscounts. 14 airports are capable of accomodating the F-27s. The rest are only suitable for DC-3 and smaller types of aircraft. Three airports in all (Adana, Esenboğa and Yeşilköy) can be used by every type of aircraft.

None of the existing airports is fully utilised. To cite an example, the Adana airport is capable of serving 13,870 F-27 flights per annum. Actual flights made at this airport amount to only 146. The potential capacity of the Esenboğa airport for the same type of aircraft is 47,017 per annum, but the actual number of flights stands at 2,007 . At Yeşilköy, the figures are 54,845 and 2,080 respectively.

14 airports are unsuitable for F-27s; they can only accomodate the DC-3s . This latter type has lost its usefulness compared with the F-27s. DC-3s should be gradually reduced in number, and airports be duly converted to accomodate the flights of the F-27s . Although the basic criterion for the conversion is the Turkish Airlines schedules, attention must be paid to the situation which will come about after the reorganization of schedules.

In the near future, the number of flights will not increase enough to create a need for new airports. Therefore, no airports should be constructed. At none of the existing airports, more than 25 per cent of capacity is used. In fact, in many cases utilization is under 10 per cent. This should be considered normal, because it is not the number of runways but the availability of supply and maintenance services that determines the capacity of an airport. These services must be available at all times, which makes large capacities inevitable. Turkey's existing airports are adequate for air transport to all parts of the country.

Of Turkey's airports only Esenboğa and Yeşilköy are used by foreign aircraft. It is intended to adopt a decision which will force foreign airlines to select either one of the two airports. This is being done for the purpose of increasing the number of passengers carried by the Turkish Airlines on Istanbul-Ankara route. Such a step, however, might reduce the number of foreign aircraft using Turkey's airports, thereby reducing the earnings of the Turkish Airports Administration. Therefore, no measures should be adopted before comparing the probable loss of revenue of the Turkish Airports Administration against a probable revenue increase for the Turkish Airlines.

(2) SUGGESTIONS AND RECOMMENDATIONS

Turkey's airports meet present needs. While it is unnecessary to construct new ones, existing airports should be improved according to the needs of the Turkish Airlines.

d. COMMUNICATIONS

(1) THE PRESENT SITUATION

Communication services (PTT) consist of mails, telephone and telegraph. It is only natural that communication services will expand in a developing country. In recent years, communications by mail as well as by telephone and telegraph have steadily increased in Turkey. Increases in PTT services and activities in the long run occur in conjunction with the standard of living. In Turkey, there is a growing and ever-expanding demand for telephones. Expansion of telephone communications, however, depends upon the establishment of new switchboards to increase the extent of telephone services. Unlike many other services, communications are related to certain imponderable factors, as shown concretely in the table below :

TABLE 1

TRENDS IN COMMUNICATIONS

	Domestic Mails	Domestic Telegraphs	Telephone	
			Metropolitan	Inter-city
1957	184,320,000	11,224,000	245,245,000	10,054,000
1958	200,480,000	11,703,000	257,953,000	11,805,000
1959	230,793,000	11,477,000	281,914,000	13,089,000
1960	227,723,000	9,908,000	268,684,000	12,533,000

In 1960 PTT services suffered sharp declines. The reason for this may be found in the political and economic situation.

Under the circumstances, it is rather difficult to forecast the developments in communication services in the coming years. In 1961, however, the peak reached in 1959 will not have been attained On the other hand, demand for communication services may somewhat increase in 1962 as a result of political stability and a more dynamic economic situation.

(2) PROBLEMS

(a) Postal Services

(i) An increase in the volume of letters mailed will create no strains on the postal facilities. However, PTT authorities should utilise the existing set-up in a more rational way, in which case the same facilities will create a large volume of postal activity.

(ii) Often new post offices are opened without regard for the extent of demand, and occasionally choice of areas is made at random.

(iii) In Turkey, numerous post offices are kept open after regular hours and on holidays. This uneconomical practice, encountered in most parts of the country, causes a substantial expenditure. In reality it is possible to offer the same services without incurring such an expenditure.

(b) Telegraph Services

Telegraph facilities are available in all parts of Turkey. The number of lines vary according to the density of traffic. PTT authorities introduce new lines whenever such additions are justified by the increase in traffic.

(c) Telephone Communications

1) Unlike telegraph networks, telephone systems require switchboards. However, the following Table shows that Turkey, taken as a whole, has no shortage of switchboards.

TABLE 2

THE CAPACITY OF TELEPHONE EXCHANGES AND THE NUMBER OF SUBSCRIBERS

	Capacity	The number of subscribers
1957	181,372	154,316
1958	186,903	167,230
1959	189,327	172,765
1960	200,248	180,030

The aggregate situation notwithstanding, some of Turkey's major cities have a shortage of telephone lines. Consequently, work has been started in 1961 to provide 55,700 additional lines in Ankara, Antakya, Izmir, Adana, Mersin, Iskenderun, Kayseri, Konya, Samsun, Trabzon, Istanbul, Bursa, Malatya, and Diyarbakir. This expansion will meet the demand in 1962.

2) At present, automatic switchboard systems seem to be favored. However, no comparison has been made between the automatic and the manual systems. Rough estimates by PTT authorities show that only those automatic switchboards which serve 1,200 or more lines are economically feasible.

Regardless, many automatic switchboards have already been installed. This matter must be studied carefully before reaching a decision.

(3) SUGGESTIONS AND RECOMMENDATIONS

a) The PTT Administration should evolve and adopt more efficient management principles;

b) An end should be put to the opening of uneconomic post offices. Agencies, which are less costly to run, should be opened where the volume of work is small.

c) Working hours of post offices should be confined to official working hours to avoid incurring large expenses for a small revenue. In particular, the practice of keeping post offices open during holidays in large cities, where there are numerous branches, should be abandoned. A single branch or a head office would suffice to meet the demand.

d) The pricing of postal services should be revised and a progressive price structure adopted.

e) Telegram and telephone lines should be distributed according to economic needs, except for security and administrative requirements.

f) A comparative cost analysis should be made between automatic and manual switchboards, and a basic decision taken with due regard to foreign exchange and manpower costs.

5. MINING

a. THE PRESENT SITUATION

(1) Mineral prospecting and exploration in Turkey are conducted mostly by the Institute of Mineral Prospecting and Exploration (Maden Tetkik ve Arama Enstitüsü). Due to a scarcity of capital, exploration by private enterprise is at a minimum.

(2) Development of Turkey's mineral resources is handled by both state and private enterprises. This function, however, is not pursued according to an overall plan or program.

(3) On April 1, 1961, for the purpose of mineral prospecting and development, the private enterprise formed the Commission of Assistance for Mining through the Association of the Chambers of Commerce and Industry. This commission serves the **entrepreneurs** by handling the prospecting and exploration of the enterprises which hold mining permits, and by extending or procuring credits for mineral development. Its range of activity at the present is relatively limited.

(4) Production in mining in the last few years has been divided as follows : (a) 75 % state enterprises, (b) 15 % large-scale private enterprises with an output of over 10,000 tons per year. (Their number is estimated between 10-20), (c) 10 % numerous small private enterprises.

(5) Production of major minerals from 1958 through 1960 is shown in Table 1 on the following page :

TABLE 1.

MINERALS	PRODUCTION (tons)		
	1958	1959	1960
Iron	865,696	607,253	820,615
Chromium	474,526	310,024	464,667
Copper	22,530	25,037	26,223
Manganese	26,175	41,123	49,593
Lead	2,130	,565	5,120
Antimony	2,830	2,743	2,365
Barite	2,855	1,600	1,410
Borasite	45,396	62,724	65,881
Sulphur	14,800	10,650	10,295
Zinc	1,373	3,300	3,900
Mercury	69	60	69
Asbestos	1,636	1,051	6,705
Magnesite	320	1,495	887
Emery	7,172	7,610	8,795
Fluorite	500	150	1,050
Meerschaum	81	67	97
Pyrite	500	150	1,050
Sodium Sulphate	840	331	1,550

(6) Except for iron ore, mineral production is mostly exported. Consumption by domestic industries is limited. Export sales for 1956 - 1960 are shown in Table 2.

b. PROBLEMS

(1) Although Turkey's mineral resources constitute a major source of revenue, their exploration, production and use seem to suffer from lack of planning and economic direction. In many cases, mining operations are conducted in an unbusinesslike manner.

(2) In exploration activities, lack of planning emerges as a severe drawback. The Institute of Mineral Prospecting and Exploration (MTA) does not perform its functions effectively because of lack of planned action.

(3) The procedure of issuing exploration permits must be simplified and expedited. At present, it takes extremely long for an entrepreneur to obtain a permit. This, in turn, lessens the entrepreneur's incentive to enter the field. Delays in granting permits resul from red-tape and from the inadequate organization of the Mining Department of the Ministry of Industry.

TABLO : 2

EXPORTS OF MINERAL ORES

IMPORTANT MINERALS	1956		1957		1958		1959		1960	
	Ton	(000 $)	Ton	(000 $)	Ton	(000 $)	Ton	(000 $)	Ton	(000 $)
BORASITE	3339	156	21974	1002	51262	2159	61496	2294	6152[illegible]	2241
IRON ORE	239149	1191	513452	6582	226420	2451	133360	1080	305843	2483
COPPER ORE	-	-	-	-	-	-	13004	7800	22000	14400
MANGANESE ORE	55154	1694	33955	1006	24006	908	23214	839	28736	714
CHROMIUM ORE	642009	23265	571122	21411	156004	18749	305001	10070	306220	11450
ANTIMONY ORE	1905	354	2879	514	2550	432	2089	257	2277	272
MERCURY	11	70	2	12	-	-	445,5	265	4	20
ALL MINERALS	1119824	47198	1221169	41241	933315	32026	639544	234,2	994192	32157

(4) The entrepreneur often lacks the funds necessary for mineral development and full-fledged mining operations. Existing credit and loan organizations are reluctant to extend credit to this sector because they find it too risky. As a result, large and small mining enterprises alike, including state enterprises, suffer from substantial financial hardships. To counteract this problem, some of the major mining entrepreneurs resort to the practice of securing short-term high-interest loans on the strength of their commercial credit which they have acquired through other business activities and personal assets.

(5) Although mining offers the advantage of not requiring raw materials for production, it does require a substantial amount of equipment and tools which are of vital importance not only from the standpoint of personnel and material security but also for curtailment of extraction costs. Turkish entrepreneurs cannot obtain the necessary equipment at the same favorable prices and terms as their competitors abroad. This results in attempts to meet the competition by mining almost exclusively the high-quality veins. Consequently, mining possibilities become restricted and national resources are wasted because of the closing or abandoning of many a potentially productive reserve.

(6) Among the factors which restrict Turkey's exports, the following stand out :

(a) Competition is intense on the international market.

(b) There are often wide variations in the quality of Turkey's output.

(c) Turkey cannot guarantee continuous supply from current output or stocks.

c.- SUGGESTIONS AND RECOMMENDATIONS

(1) The Institute for Mineral Prospecting and Exploration (MTA) is not in a position to prevail upon either Etibank or the private sector to extend their operations. This is one of the reasons for the lack of development in a sector of major investments. To remedy this deficiency, the Institute should be expanded, its explorations directed towards known targets, and attempts made to urge it to develop constructive projects. Moreover, relations (particularly coordination) between the Institute and Etibank, and between the private sector and the educational institutions definitely require improvement.

(2) The Mining Law, 6309 is relatively new. The deficiencies in its implementation result from its structural defects and gaps and from the ambiguities of its text. Furthermore, the decrees and regulations issued to complement this law fall short of simplifying

expediting and clarifying matters. The Law's implementing machinery, likewise, proves inadequate.

In 1962 a permanent commission should be formed to make comparative studies in connection with improving the Mining Law and its complementary decrees and regulations, thereby giving the mining sector a workable basis for operation.

(3) In order to issue exploration permits easily and on time, the Mining Department of the Ministry of Industry should be reorganized. A survey on such a reorganization must be undertaken at once.

(4) A Mining Development Bank should be established to supply credit and capital to mining enterprises. In order for the bank to perform its credit function, a law should immediately be drafted to enable the mining firms to put up their mining and exploration permits as collateral.

(5) It is possible to manufacture in Turkey some of the equipment needed in the mining operations. The excess capacity found in the Machine and Tool Industry should be directed partially to the manufacture of such equipment.

6. THE MACHINE AND TOOL INDUSTRY

a. THE PRESENT SITUATION

(1) A survey of the machine and tool industry, including the private and public sectors, revealed a substantial unused capacity (probably about 70-75 %) in this sector. This situation is true not only of this year or recent years but has existed by and large since those establishments came into being.

The following may be mentioned as the most important of the various reasons for the existence of unutilized capacity :

No stable import policy has yet developed.

Over-all organization in the industrial sphere is inadequate.

Errors have been made in the initial establishment.

In plants established according to an anticipated future level of demand, the expected results have not materialized.

Business fluctuations have had an adverse effect.

TABLE 1.

CAPACITY AND PRODUCTION IN VARIOUS BRANCHES

Type of Product	Installed Capacity	Actual Production	Year
Bolts, nuts, rivets, screws	54 568 tons	2 400 tons	1960
Casting	127 716 "	44 926 "	1956-58
Iron and Sheet Products	3 000 "	984 "	1960
Machinery, tools, spare parts			
Pistons	53 500 number	5 000 number	"
Liners	40 000 "	7 500 "	"
Rings	1 025 000 "	16 000 "	"
Miscellaneous (various motors, pumps, washing and sewing machines)	62 000 "	17 700 "	"
Ship Construction	32 300 tons	6 870 tons	"
Assembling of Motor Vehicles	14 900 number	3 896 number	"
Agricultural Implements			
Tractors	1 500 "	725 "	"
Threshers	1 200 "	700 "	"
Ploughs	40 000 "	10 000 "	"
Carts	10 000 "	5 000 "	"
Scythe blades	1 600 000 "	200 000 "	"
Miscellaneous	50 000 "	26 000 "	"

(2) The major part of consumption requirements are met by means of imports. In 1959 40,000 tons of motor vehicles were imported, in 1960 47,000 tons, and in the first half of 1961 15,000 tons. The figures for machinery, tools, and spare parts are 73,000 tons, 87,000 tons and 32,000 tons, respectively.

b. ESTIMATES FOR 1962

It is virtually impossible to determine the internal demand in a precise manner because of the multitude of different items and the importance of differences in quality.

However, in connection with items not produced in Turkey, one may say that internal consumption is increasing rapidly, and that in all probability significant imports are unavoidable. Furthermore, inasmuch as investments in 1962 will exceed the investments made in the past few years, an increase in demand is expected in this sector.

c. PROBLEMS

(1) As a result of a curb on imports after 1954 because of a variety of factors, including a decline in Turkey's external payments capacity, a significant demand for the products of this sector arose. The possibilities of easy and quick profits induced by the prevailing inflationary atmosphere caused private enterprise to content itself by making a partial analysis of the market without any knowledge of the intentions of other enterprises. Moreover, inasmuch as each entrepreneur made his investment with an eye to the demand he expected to be confronted with in a number of years as a result of the specific character of the industry, a substantial capacity emerged which could not be used at once.

(2) The same situation exists in the public sector because of lack of a continuous work program in factories or workshops, the desire of each workshop to have the equipment necessary to manufacture and repair everything it needs, and finally, the inadequate commercial intercourse of these enterprises with the private sector.

(3) In addition, the absence of standardization for the industry of the whole country, the backwardness of working methods, and the introduction of prohibited imports into the country by other methods have hampered the development of production.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) It is necessary to examine import programs from the point of view of internal production and to curb imports in areas in which reasonably priced commodities of good quality are produced in adequate quantity.

The Turkish Association of Chambers of Commerce, Chambers of Industry and Chambers of Commodity Exchanges should bring out each year a directory of industrialists, publish private and public sector requirements in monthly circulars, organise exhibitions, and encourage participation of industrial firms in fairs in this country and abroad.

The Central Bank must publish its allocations monthly to make sure that the industrialists are informed.

(2) By making use of equipment and plants which exist in Turkey and existing personnel, all kinds of tools and equipment, cement, textiles, sugar, food, products, briquetting plants, and all types of heavy structural steel, railroad wagons, locomotives, agricultural implements, and machinery can be produced.

For this purpose, consideration should be given to the establishment of a " Turkish Machine and Steel Construction Industry Organization".

(3) With its present shipyards and existing personnel, Turkey can meet its needs for hulls, coastal vessels, ferryboats, tugs, all kinds of port cargo vessels - barges, lighters, special transport vessels, tankers etc.

For this purpose consideration should be given to the establishment of a " Vessel Construction and Repair Organization ".

(4) Tractors and other important agricultural machinery in quantities and of types to meet all of Turkey's needs can be made in Turkey. To this effect it is essential to expand and build up the Tractor Factory.

(5) The Motor Vehicle Industry : The existing assembly plants should be combined with other industries and within the next five years built up sufficiently to produce the trucks and jeeps which Turkey needs.

(6) The army echelon shops which are at present under military control and the airplane factories should not be expanded further. They should restrict themselves to meeting the needs of the army and abstain from undertaking work outside the military sector.

(7) The organisational measures which must be taken can be listed as follows :

a) The Ministry of Industry must be organized in a manner which will permit it to give orientation and supervision to industrial development. To this effect, it must be endowed with extensive powers and resources.

b) Priority must be given to the organization of quality control and the establishment of laboratories.

c) Close cooperation must be established between the Ministry of Industry, Association of Chambers of Commerce, Chambers of Industry, and Chambers of Commodity Exchanges, the Turkish Standards Institute, and the State Planning Organization.

d) All the establishments in the education system must be organized in a manner to promote the industrial development of our country.

(8) The Turkish Standards Institute must set standards more rapidly.

(9) The following measures must be taken in connection with certain branches of industry :

a) With respect to tools and machinery, efforts should be made to meet the needs of organizations, including the public sector, primarily with domestic production. Only in case of necessity should there be recourse to imports.

b) In the preparation of import programs consideration should be given to the protection and especially the encouragement of domestic industry.

(10) Because of their relevance to all branches of industry the following topics should be examined in depth and made the subject of separate investigations :

a) Raw Materials :

The cost and quality of the raw materials (iron, steel, coal, electricity, water, other metals, and auxiliary materials) necessary from the point of view of the development of the aforementioned industrial sectors in Turkey should be investigated and the possibility of adjusting their prices should be studied.

b) **Foundries :**

Consideration must be given to measures for raising the productivity of the dispersed foundries belonging to the State Sector and to enable the private sector foundries to produce high-quality and economic pig iron and steel castings.

c) **Quality Control :**

Consideration must be given to institutional measures to assure that Turkey's industrial products are of acceptable quality.

d) **Technical Education and Training :**

The main lines of the technical education and training policy necessary for the development of industry in Turkey, together with the condition of the existing educational and training institutions and the measures which should be taken anew in this respect, must be investigated.

e) **Foreign Capital :**

The ways in which foreign capital can be used, especially in the development of the tool and machinery industry, should be studied.

THE CHEMICAL AND PHARMACEUTICAL INDUSTRIES

a. THE PRESENT SITUATION

The interest which the State Economic Enterprises have shown in the chemical industry and in the production of chemicals has been mostly from the point of view of assuring their own requirements or utilizing their by-products. This attitude caused the establishment and development of the chemical industry to be dependent on the capabilities of private sector enterprise and thus led to the creation in Turkey of an industry consisting of small and scattered units instead of a big and consolidated one.

According to the latest available figures, the production of the chemical industry in Turkey in 1959. amounted to 615 million T.L., of which about 450 million T.L. was in the State Enterprises. These figures do not include the production of the pharmaceutical industry, which amounted to 226 million T.L. in 1959. The pharmaceutical industry, however, consists mostly of transforming imported raw materials by simple processes. It has not been possible to determine how much of this 226 million T.L. represents the value added by this industry.

In fact, for a long time the demand for the products of this sector has to a large extent been met by imports.

Imports of
Chemical Products and Pharmaceuticals
(In $ 1,000)

		1958	1959	1960	1961 (x)
1.	Imports of chemical products and pharmaceuticals	52486	83288	67542	32810
2.	Percentage of total imports	16.6	17.5	14.4	16.6

(X) Figures for the first six months.

The capacity operated by the Government in 1961, including the new facilities of the Azot Sanayii T.A.Ş. (Nitrogen Industry), is capable of producing470,000,000.00 TL. worth of chemical products. The capacity of the facilities established with private capital is estimated to be 1,350,000,000.00 TL. Since the production estimates for this year are not available, it is not possible to say how much of this capacity was used. But it is known that an important percentage of this capacity has been idle in recent years.

The Azot Sanayii T.A.Ş. has only started trial operations and has not produced on a large scale. The extent to which its capacity of approximately 110,000 tons will be used depends on measures to be taken in various fields.

The capacity of the alcohol industry is 24,000,000 liters. The entire output must be sold to the State Monopoly. Since the State Monopoly requires only 16-17,000,000 liters of alcohol, 8,000,000 liters of capacity cannot be utilized.

The annual capacity of the Iskenderun and Yarımca Superphosphate plants is 200,000 tons. Their annual production, however, is only 25,000 tons, because their output is more expensive than the imported product.

The 1961 capacity of the pharmaceutical industry can produce an output worth 864,000,000 TL. But it is estimated that this industry also uses only 40-45 % of its capacity.

b. ESTIMATES FOR 1962

Considering the available capacity, it is possible for production to be substantially increased.

A forecast of 1962 demand has not been made. The policies that will be followed in many fields (plant and animal disease control, synthetic fertilizers, health, etc.), together with the increase in national income, will determine the level of demand and its allocation to different fields. Since a significant part of demand is met by imports, the balance of supply and demand will depend to a large degree on the availability of foreign exchange.

c. PROBLEMS

The chemical products industry offers great possibilities for import substitution because for some time a significant excess capacity has been added to the raw materials potential which Turkey offers.

But inadequacies of quality, standard and price of production causes the continuation of importation. Thus the development of newly established domestic industry is hampered and our requirements in this area are met to a large extent by the expenditure of foreign exchange (it represents 16-17 % of the total value of imports).

(1) When the major requirements of the country are taken into consideration, it is clear that the production of the fertilizer factories is not adequate and the price of their products is higher than the generally accepted norm.

(2) The demand for alcohol by the State Monopolies causes an important amount of production capacity in the alcohol industry to remain idle. Therefore, a significant amount of molasses cannot be utilized.

(3) The super-phosphate factories meet their sulfuric acid requirements with imports. On the other hand, the gases of the Etibank Murgul facilities which can be used in the production of sulfuric acid are wasted due to the lack of transportation facilities.

(4) At present the pharmaceutical industry in Turkey is confined to pharmaceutical blending, and the greater part of the raw materials and auxiliary supplies are imported.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) The importation of chemical products, the domestic production of which is satisfactory from the point of view of quality and price should be prevented. The work of the Association of Chambers of Commerce, Chambers of Industry and Chambers of Commodity Exchanges on this subject should be given more emphasis and should be rapidly furthered.

Technological advances in these industries in other countries are rapid. Therefore, on the one hand the utilization by domestic consumers of these new products and pharmaceuticals should be encouraged. On the other hand, encouragement should be given to the producers to include these new products in their production programs .

(2) In order to improve quality new regulations establishing standards for chemical products should be prepared, the inspection laboratory of the Ministry of Industry should be strengthened so that prompt and timely inspection can be performed and supplies of low-quality goods .. kept off the market.

(3) It is essential that Etibank provide immediately the tankers necessary to move the sulfuric acid

produced at the Etibank's Murgul works to the Iskenderun and Yarımca super-phosphate factories and reduce imports of these products.

(4) All measures should be taken to assure the conversion of the pharmaceutical industry from a blending operation and to assure that Turkey's raw materials and semi-manufactured products are worked by domestic and foreign firms established in the country.

(5) The Monopolies Administration should increase its alcohol purchases by encouraging domestic sales or expanding exports so as to utilize to a greater degree the alcohol production capacity of the sugar industry.

(6) Taking into account the large requirements of Turkey's agriculture, the nitrogen fertilizer industry should increase its production and adopt all measures to reduce its production costs, which are understood to be very high at present.

(7) Although super-phosphate imports are exempt from customs, the sulfuric acid imports needed for domestic production of phosphates are subject to customs duties. This situation raises the cost of domestic phosphate production and makes it necessary that importation of super-phosphate fertilizers be taken off the liberalization list.

(8) The chemical division of MKEK (Machinery and Chemical Industry Organization) should be separated and combined with the nitrogen and super-phosphate industries, and a " Chemical Industries Organization " should be established.

8. THE PAPER INDUSTRY

a. THE PRESENT SITUATION

As much as two-thirds of Turkey's needs for paper and cardboard are supplied by the Paper and Pulp Mills of Turkey (SEKA) established by Law No. 6560, and one-third is imported. As for wrapping paper, the 7 small manufacturing plants in Istanbul belonging to private enterprise have produced approximately 10,000 tons of wrapping paper in recent years.

TABLE : 1

WRAPPING PAPER (tons)

Years	SEKA Production	Other Production	Imports	Total
1956	13646	-	3664	17310
1957	14995	-	7151	22146
1958	14404	10805	8298	33507
1959	15578	9610	10078	35266
1960	18218	10000	9277	37495

TABLE : 2

PAPER FOR PRINTING AND WRITING (tons)

Years	SEKA Production	Imports	Total
1956	15781	13425	29206
1957	17811	19571	37382
1958	19364	17879	37243
1959	19235	25246	44481
1960	19742	15736	35478

TABLE : 3

CARDBOARD (tons)

Years	SEKA Production	Imports	Total
1956	15860	1117	16677
1957	21492	742	22284
1958	23961	1058	25019
1959	22824	2764	25588
1960	17745	878	19625

b. ESTIMATES FOR 1962

(1) Wrapping Paper

It has been estimated that SEKA's production in 1962 will be approximately 22,000 tons. With the production of the private plants total production of wrapping paper will be 32,000 tons.

The demand for wrapping paper, however, has been estimated as 40,000 tons. Thus, the need for imports amounts to 8,000 tons. Much of this is kraft paper.

(2) Writing and printing paper

Production, which in recent years has been appoximately 20,000 tons will rise to 45,000 tons in 1962. With this increased output, demand for newsprint and third quality paper will be completely met by SEKA. However, because production of first quality paper will not meet the demand in 1962 it will be necessary to import up to 4,000 tons. Thus, as a result of the expansion of SEKA, (of which the first stage was completed in 1961 and which will go into production in the first months of 1962) the import level, which in recent years has been about 20,000 tons, will drop to 4,000 tons. Once the new production possibilities are fully realized. It can be expected that, following the completion of the expansion within a few years, imports will be further reduced.

(3) Cardboard

The production of cardboard has been estimated at 30,000 tons for 1962. Estimates of demand are about 30,000 tons. Thus, imports will be confined to about 600 tons of certain special types of cardboard.

(4) Imports of raw materials

It is estimated that wood imports of 55,000 m^3 in recent years will rise to 70,000 m^3 in 1962.

(5) Continuing investments

When the machine for cigarette paper is put into service in 1962, the present expansion of SEKA will be completed.

c. PROBLEMS

Because SEKA does not at present possess any sulphate pulp facilities kraft paper to meet the packaging requirements of sugar, cement, and synthetic fertilizers is imported; moreover, SEKA is importing a limited amount of kraft pulp.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) Sulphate pulp and kraft paper facilities must be included among SEKA projects. A project on this subject previously prepared by the Sumer Bank should be studied by SEKA and put in final form by 1962.

(2) In order to reduce wood imports, the sale by the General Directorate of Forests to SEKA of cheap wood of suitable quality should be assured.

9. THE AGRICULTURAL SECTOR

The food requirements of Turkey's population and a significant proportion of its export goods are accounted for by the products of this sector.

These products offer considerable variety and are distributed throughout the country. The size of the sector and the variety of products stand in the way of our having adequate statistical data. For this reason, analysis will be undertaken of those fields for which relatively reliable data is available and the principal remedies will be investigated .

a. ESTIMATES FOR 1962

Production in Turkey is chiefly affected by the factors of " yield " and " area cultivated " .

(1) It is apparent that, excluding very dry or very rainy years, there was no significant and consistent increase between 1940 and 1960 in the yields of field crops, legumes and oil seeds, which are Turkey's most important crops.

Only in industrial crops - excluding cotton and tobacco - and in some fruits, especially citrus, did the yield increase.

Assuming that this twenty-year trend continues, yields per hectar of 1,113 kg for wheat (1), 1,348 kg for barley, 1,332 kg for green beans, 19,884 kg for sugar beets, 79 kg for hazel nuts (per 100 trees) and 300 kg for cotton will be obtained in 1962 under normal climatic conditions. One can expect that the increase in cotton yields observed over the past three years will continue.

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(1) This estimate was made on the assumption that 1962 would be a normal year. If one assumes that this year will be among the best or worst the yield can vary between 1,431 kg. and 795 kg. within a margin of accuracy of 95 % .

(2) As is known, agricultural production in Turkey does not rise in proportion to additional land put under cultivation. For this reason, it appears that the limits of the area which can be cultivated under the most economic conditions have been exceeded for some time.

The population increase is causing a steady increase in demand and on the other hand the growth of the rural population is creating a surplus labor force which is not being used.

Therefore one must expect that approximately 150,000 ha. of pasture may be converted to cultivated land next year. With this and to other factors taken into account, it has been estimated that the area sown to wheat in 1962 will be 7,875 million ha. Similarly the area of land to be sown to barley has been estimated as 2,875 ha.

(3) Based on these estimates and assuming that 1962 will be a normal year for weather conditions, production of wheat is projected at 8 - 8,800,000 tons. However, because the 1961 crop was relatively poor it will be necessary to make some imports to meet consumption needs until the new crop is harvested.

Barley production will meet consumption requirements. Cotton production can be expected to be 190,000 tons and sugar beet production 2,700,000 tons.

One can expect an increase in the production of certain fruits (such as peaches, apples, grapes, melon, strawberries, and citrus) for which both internal and external demand is growing.

The same can be said for hazel-nuts and pistachios which are among our important export commodities. However, production adjustments appropriate to the nature of this branch of agriculture involve a rather long time. Therefore, this will not be an issue from the point of view of exports in 1962.

The stagnation observed in tobacco sales in recent years and the lack of significant increase in foreign demand for **Turkey's** oriental-type tobacco indicate that there may not be any considerable change in the 1962 production of this item.

In recent years production of legumes increased by some 30-40,000 tons annually and reached 632,000 tons in 1960. **Exports** of legumes has varied from 50 to 60,000 tons within the last two years. Legumes are one of the crop groups the production of which is to be encouraged from the point of view of exports.

In general, production of oil seeds has not increased. In fact 1960 production (552,000 tons) is a little less than 1959 (577,000 tons); even if 1962 production is at the level of 1959 or slightly higher, there may be a decrease in export volume as a result of increase in domestic demand.

Exports, which were 59,400 tons in 1959, dropped to 32,200 tons in 1960. Essentially, in the years 1956, 1957, and 1958 the export level remained **at about** 10,000 tons.

Production of mohair, one of the livestock products, has been about 10,000 tons over the last four years and shows no significant change. Measures to encourage the production of mohair, one of the important export commodities, should be sought (in 1959 8,442 tons and in 1960 4,629 tons were exported).

Wool production has increased parallel to the increase in the sheep population, rising from 40,000 tons in 1957 to 47,000 tons in 1960. As a result of the increase in domestic consumption, however, the volume of export has not increased. At present production of merinos wool is increasing at a rather rapid rate.

b. PROBLEMS

(1) Problems related to horticulture and field crops :

(a) The problems of the geographic regions and the branches of agriculture, which are inherently diverse and very numerous, are varied. Therefore, it will be difficult and useless to make a complete inventory of the problems here. The problems touched upon are problems which it is agreed are general and long-term and will require the adoption of certain measures in the year 1962.

(b) Under present conditions, the number of people working in agriculture is far in excess of the need. Parallel to the increase in agricultural produdtivity, it is necessary for industrial and other sectors to employ a larger number of people than the increase in agricultural population. The present hidden unemployment has the following consequences : it hinders the extensive use of new methods which would increase productivity, reduces agricultural income which in turn weakens entrepreneurial ability, and on the whole decreases the size of operational units to such an extent that they are uneconomic.

This excess population is on the one hand a result of the increase in population and on the other a result of mechanized operations using a relatively smaller labor force.

(c) Education in general, and especially technical education and training, scarcely reaches our villages. It is obvious that the efforts spent in this field are inadequate in relation to the needs. Basically the peasant attitude makes it difficult to introduce all kinds of innovation. For this reason, it is necessary that educational efforts be further intensified and methods to influence these attitudes be continually sought.

There are only 1,500 technicians striving to increase the technical knowledge of more than 3 million farmers spread over 40,000 villages. The seriousness of the problem will be realised better when it is remembered that every technician has to deal with 25-30 villages and 2,000-2,500 farmers on the average (particularly when are taken into consideration the distances between villages).

The six schools now in operation are not even able to meet the personnel needs of various organizations. Seven schools provide education for school-age children of farmers their annual enrollment is 2,300 and only 500 graduate from them each year..

(d) The income of a very large percentage of the agricultural sector is extremely low. The average income of the peasant is approximately 950 TL. while that of those employed in occupations other than agriculture is 2,740 TL. Thus per capita income outside agriculture is approximately three times that of the peasant.

(e) The smallness of the area farmed in relation to the size of the village population is the reason that operational units are small. Moreover, the fragmentation of this land among families increases this tendency. According to a survey made by the Central Statistical Office in 1952, 75.4 % of farm families work 29.4 % of the total area farmed, and 24.6 % of farm families work 70.6 %. In the first group the average per family is 2.95 hectares and in the second 22.27 hectares. In the use of land, there is no thought of enhancing its value, or the methods for doing so are not known. Small land-holders or landless farmers have not been able to unite as strongly as necessary in the form of cooperatives and syndicates handling production and sales functions. Therefore, Turkey combines in itself the drawbacks of both large estates and small land holdings.

(f) To a large extent, custom and the inclination to provide personally for one's own needs determine **crop patterns**, and frequently land which could produce valuable crops is used for low-value crops. In **Turkey** the place of various crops within the crop total and the geographical distribution of these crops are not consistent with internal or external demand. This is a result of the primitiveness of the marketing systems and the present inadequacy of links between the various regions and markets.

(g) Among natural climatic factors, rain plays the most important role. The difference in yield between dry and rainy years is very great. Therefore, irrigation works are very important. Moreover, flood prevention is important from the point of view of assuring the safety of crops.

Of the 25 million hectares sown today, only 2.4 to 6.0 % are irrigated. Studies show that it is necessary to irrigate each year at least an additional 100,000 to 150,000 hectares. At present DSI (State Hydraulic Works) brings an additional areas of 25-30,000 hectares per year under irrigation. The mere construction of major irrigation facilities is not enough. In addition, small works such as facilities in the fields must be built, the best methods of using these facilities must be demonstrated to villagers, the application of appropriate rotation systems should be assured, and in this connection convincing information must be provided concerning fertilizers, plant and animal disease control,etc.

(h) According to calculations, 3-4,000,000 tons of commercial fertilizers must be applied to the soil yearly in order to return the chemicals removed from the soil by crops and thus conserve the long-term equilibrium.

The amount of fertilizer used, however,has been very low both because natural fertilizers are mostly used for other purposes and because the price of artificial fertilizers are high compared to crop prices. If the 100-200,000 tons of fertilizer used annually is divided by the area sown, the ratio is so low that it cannot be compared with that of any other country.

Moreover, circumstances such as the deficiencies of necessary technical knowledge and the inadequacy of irrigation . prevent farmers from using fertilizers.

(i) A significant portion of these problems can be solved to a considerable extent by increasing the investible capital available to peasants. But because Agricultural Bank credits are given without reference to productivity and are usually given to farmers in very small amounts, they are largely diverted to consumption and therefore repayment is difficult and the desired influence on production is not achieved.

In 1962 the Agricultural Bank is in a position to give only 400,000,000.00 TL. of credit. This is far below the real need. There is an imbalance between credits of different terms. In fact in 1959 85 % of credits extended were short-term, 9 % medium, and 6 % long term.

Loans are given separately for each crop instead of as one combined loan for an agricultural operation taken as a whole .

Extension of credit according to need is obstructed because the scale of land values is low, ownership registers are not in good shape and those farming as tenants or partners have no real estate collateral.

The Bank organization does not have trained technical personnel of adequate quantity and quality to exercise broad and effective credit supervision. Furthermore, cooperation between the Bank and agricultural organizations is insufficient in this respect .

The Bank's ratio of repayments is very low. Payments are frequently deferred. Therefore credit resources decrease and psychologically the peasants' repayment of their debts is not encouraged.

(j) There is a very great difference between the selling price of producers and the price paid by consumers due to the inadequacy of the marketing system.

On the other hand, very great seasonal losses occur because transportation, storage, and packing techniques are backward. For the same reason disequilibrium between regions arises.

(2) Problems connected with livestock

(a) The population of large and small head animals, which was 55,600,000 in 1950, increased to 76,100,000 in 1960. In contrast pasture area decreased from 37,900,000 ha. to 28,600,000 ha. over the same period.

The increase in the livestock population of Turkey from year to year together with the decrease of pasture area and the drop in productivity resulting from excessive grazing have made it difficult to feed the existing livestock with today's pasture capacity.

Thus, while in 1950 2 ha. of pasture was available per head, in 1960 the average dropped to 1.2 ha. In addition, if one considers that the grass production of the pastures decreased greatly in relation to 1950 on account of excessive animal grazing, that the 8-9,000,000 ha. of pasture land put under cultivation during this period was taken from the most productive pastures, and that a great part of the area that remained in pasture is stoney and shrub-covered and can only be termed steppe, one must acknowledge that in terms of 1950 conditions the area of pasture land per livestock unit was not 1.2 ha. but only 0.6-0.7 ha. Thus, pasture area per livestock unit decreased by two-thirds. From the point of view of both meat and milk, yields in Turkey are very low when compared with other countries.

Annual milk production would increase 600,000 tons if a 1 kg./day increase in milk yield were assured as a result of improvements in the feeding of milk cows in Turkey.

(b) Meat prices are low in comparison with both feed prices and the prices of other products. Although feed prices are completely free, meat prices are subject to ceilings. Moreover, the insufficiency of feed production causes feed prices to rise. Although the annual fodder need of our animals is estimated at 20,000,000 tons actual production is only 5,000,000 tons. Bran and some oilseed cake are exported and because their price is high they cannot be completely consumed domestically. Moreover, prepared feeds are expensive in relation to meat prices.

It is impossible to encourage farmers to raise higher quality animals because of the lack of a price system based on the quality of meat.

(3) Problems related to Forestry

The full yield of **Turkey's forest resources is not** being realized. According to various studies and estimates, present production of industrial wood (2,000,000.00 m^3) can be at least tripled in 10 years (6,500,000.00 m^3). The lumber requirements of Tuekey's developing economy, / the industrial wood requirements of various industries, pit prop requirements, and our other similar requirements (about half of which are now imported) can be assured domestically by better utilization of forests.

(a) Grazing within the forest, fires, land clearing, harmful insects and the destruction caused by the 7-9,000,000 people who live within or near the forests are responsible for heavy losses. The amount of fire wood consumed legally and illegally by these people amounts to 80 % of total forest production. Thus we are confronted with two main problems : the destruction mentioned above, and the use of a great part of production as fire wood. In this connection measures should be taken both to prevent various types of damage and to utilize more of the output as industrial wood.

(b) "Problems such as the inadequacy of forest roads, the lack of organisational personnel, machinery and equipment, the fact that operation plans have not been completed and that it has not been possible to resettle forest villagers in other places, etc. must be solved by long and short term measures.

(c) Forest boundaries and ownership matters have not been solved yet. At present less than 40 % of forest land can be delimited . Land survey work should be accelerated.

(d) Because of deficiencies in the forest inventory, full utilization cannot be achieved.

(e) Production techniques used for forest products are ineffective. Moreover, the output which is produced cannot be well preserved.

(f) The standardization of forest products and relations with both domestic and foreign markets should be improved.

(4) Problems Related To Fisheries

(a) We do not have adequate information about Turkey's ocean and inland fishery resources and their potential yield. Nevertheless, it can be estimated that only one-sixteenth of the fishing potential is being exploited at present.

(b) The production of fish shows great seasonal and annual fluctuations. This is chiefly due to two reasons;

(i) Migratory species which are subject to seasonal patterns or cyclical fluctuations of a few years duration account for approximately 65-75 % of total fish production.

(ii) When fish of migratory species go far away from shore they are not followed and it is not known where they are when fishing is not in progress.

If temporary fluctuations in production because of the above-mentioned reasons are disregarded, it can be said that no upward trend has taken place in the production of fish and fishery products in the last 8-10 year period. According to available information, the annual production within this period is around 100,000 tons and reached its maximum in 1956 with 139,000 tons.

(c) In Turkey, the amount of fish and other fishery products consumed per capita is about 3 kg. gross. This places Turkey among the lowest fish-consuming countries in Europe.

(d) The export of fishery products fluctuates from year to year parallel to production. Fluctuations aside, the export of fishery products has not shown an upward trend during the last ten-year period. (It is about 7 - 8,000,000 TL.)

(e) In fishing the actual demand or marketability are the most important factors affecting production. Within the optimum yield capacity of the resources it is possible to raise production to the extent that markets can be assured.

(f) The fact that the appearance of migratory fish depends on seasonal and periodic fluctuation of several years, duration causes production to be irregular and variable and prevents stability of markets and sales. The same factors prevent price stability.

(g) The present regulations on fishery products (especially a police regulation on fishing dated 1882) include rules that are real handicaps or cannot be applied under today's conditions. Public services related to fisheries are carried on by units of state enterprises, various ministries, state departments and institutions, university and local administrations usually in addition to their basic functions. This situation makes coordination of activities very difficult. It makes the homogeneous and effective management that is necessary for development impossible.

(h) The Meat and Fish Organisation and the private sector have constructed 24 cold storages depots. Those belonging to the former operate below capacity.

(i) The fact that, according to available statistics, production has not shown a rising trend in spite of the steady increase in the number of fishing vessels with and without motors during recent years (1953 - 58) indicates that productivity has dropped.

(k) There are 34 fish canning factories belonging to the private sector. But with a single exception fish canning is not their chief activity. The existing salting, drying, fish flour, and oil facilities have a very low production because demand is low. The situation is the same for industries which produce nets, rope, winches, and similar fishing supplies.

c. SUGGESTIONS AND RECOMMENDATIONS

In Turkey, increasing yields in the agricultural sector and the development of the sector depend on solving all of these problems. Some of these are structural problems. Consolidation or division to convert farms to a suitable size, organisation for rational operation and improvement, and the establishment of a balance between land use and ownership are necessary.

Until now the problem has been seen only from the stand-point of a narrowly conceived social justice and as a matter of providing land to farmers. However, the matter is one of reorganisation with regard to the development of the most important sector in the economic structure. The solution is a well-prepared and well-planned agricultural reform. Today there is not sufficient information on which to base the decisions which must be taken in order to enter upon such a reform. There is no adequate information concerning distribution of land ownership, the relation between ownership and operation, appropriate farm sizes according to regions and according to the types of crop and the most suitable varieties of crop. Experience with agricultural extension and efforts to form cooperatives have not been systematically evaluated. The Ministry of Agriculture should be made responsible for completing the research preparatory to agricultural reform according to a definite program and within the shortest time.

(1) Irrigation

(a) More importance should be given to small irrigation projects and to irrigation from underground sources.

Wherever technically and economically feasible, the construction of large and small irrigation systems now under way should be completed section by section and put into operation without waiting for the completion of the entire project. It is recommended that the rate of irrigation be accelerated by beginning with the areas of high economic yield among the approximately 4 million hectares which could be irrigated today.

(b) Both in existing networks and in new ones to be constructed it is necessary that importance be given to agricultural research, training, and extension work and that in 1962 an additional area of 30 000 hectares be brought under irrigation.

The establishment of irrigation units, the reorganization of water rights and study and planning of river-basin and individual irrigation projects must be accelerated.

(2) Fertilizers

All measures must be taken to bring the domestic fertilizer plants into operation as soon as possible. It is probable that these plants can meet the entire 1962 requirement for synthetic fertilizers.

(a) Fertilizer prices were generally reduced in comparison with 1960 because fertilizers were exempted from customs duties. However, in order to further increase consumption of fertilizers further price reduction should be studied.

Broadscale propaganda should be made concerning the benefits of fertilizers and the low cost at which they will be sold. Where necessary subsidies should be given by the government in order to accustom farmers to the use of fertilizers.

(b) The Agricultural Organisation should teach the farmers by demonstrating the types of fertilizers, their quantity, and when they should be used. In order to assure the maximum benefit from fertilization this activity should be especially increased in irrigated areas or in regions where the rainfall is favorable.

(3) Seeds and Plant and Animal Disease Control

(a) The distribution of improved seeds, which in 1960 was 27,000 tons, should be increased to a minimum of 100,000 tons. (The capacity of the State Farms is about 70 - 75,000 tons.)

(b) In order to raise the production of seed to this level the activities and the capacity of the State Farms, Seed Improvement Stations, and Research and Experiment Stations should be expanded.

(c) The number of farmers producing certified seed should be increased and more production should be assured from them.

(d) Seed cleaning and disinfecting capacity should be raised, the number of seed selectors should be increased, and adequate disinfectants should be assured.

(e) The system of seed distribution does not work well. Seed should be made available to the farmers easily and in time.

(f) It is essential that the seed improvement organizations should be strengthened with respect to laboratories, facilities and equipment, and personnel and that new ones be established in addition to the existing ones (e.g. in South-east Anatolia.).

(g) The campaign against harmful insects and contagious diseases should be expanded. In this respect the cooperation of farmers is necessary.

(4) Machinery, Implements, and Equipment

It is necessary that :

(a) In 1962 at least 2000 tractors be manufactured or imported, and;

(b) The varieties of tractors imported should be limited as much as possible, the parts requirements should be determined on this basis, and the necessary amount should then be imported.

(5) Research, Training and Extension

(a) The scope of research studies should be broadened after the research institutions have been strengthened with respect to equipment and personnel.

(b) To strengthen the personnel, ways of making use of the students of the relevant Faculties should be examined.

(c) Both to prevent duplication and to provide answers to Turkey's most important problems, research subjects to be undertaken by various institutions should be linked to a program.

(d) The results of all researches should be collected in a central library.

(e) Importance must be given to the training of research personnel, the number of agricultural training institutions should be increased, and the capacity of existing institutions should be enlarged. At least five schools should be founded and projects should be prepared for the new schools.

(f) Training centers and centers for fixed courses should be set up and the number of traveling teams should be increased.

(g) The present system of education and extension should be re-organized and enlarged and regional organizations superior to provincial administrations should be set up.

(h) Appropriations for research must be expanded.

(6) Credit

(a) When credit is extended, measures must be taken to prevent its use for direct consumption purposes. (Better credit investigations, reports of the agricultural organization, etc.)

(b) The amount of credit must not be too little. The use of credit should be tightly supervised. Instead of giving credits for different crops separately the agricultural operations should be considered as a whole and credit given accordingly.

(c) More effective cooperation between the Ministry of Agriculture and the Bank should be developed in regard to credit supervision.

(d) Long-term credits for all types of agricultural construction should be given in installments depending on the situation and in accordance with the amount of work completed.

(7) Other matters

(a) It is necessary to develop the raising of merinos sheep's investigations concerning mohair and wool must be rapidly completed and measures of a stimulating nature adopted.

(b) Crop and livestock insurance should be established and developed.

(c) Agricultural cooperatives in all fields should be stimulated.

(d) Regulations concerning the protection of farmers' property should be improved.

(e) Small-scale agricultural industries should be encouraged and developed.

(f) The agricultural inventory should be determined in a more scientific way and, to this end, statistical methods and data should be improved.

(g) Studies of the utilization and productivity of soil should be accelerated.

(h) Measures should be taken to prevent further fragmentation of land (from the viewpoint of ownership).

(i) The problem of agricultural reform, in its widest meaning, should be studied seriously and programs prepared according to Turkey's needs and circumstances.

(j) Coordination among the ministries, General Directorates, other official and semi-official organizations, and private organizations concerned with agriculture should be assured, and duplications among these agencies should be prevented.

(k) Long-term measures should be taken to prevent the use of farm manure as fuel.

(l) Cultural measures should be taken to establish village woodlots.

(m) Soil conservation and land improvement works should be developed with the participation of those who profit from them.

(n) Flood control measures which assure the safety of crops should be continued.

(o) Seasonal and permanent idle manpower in agriculture should be utilized in work and education centers to be established.

(8) Marketing and the utilization of crops

(a) Transportation especially of fresh fruits, vegetables, and fresh livestock products, should be improved and refrigerated transport means should be assured.

(b) More facilities are needed to preserve these products. These facilities should be established mainly in producing areas. Enterprises in this field should be encouraged by the Ministry of Commerce and other concerned Ministries.

(c) In product standardization emphasis should be given to classification and packing; for this purpose medium-sized classification and packing facilities should be set up in central places and smallscale ones in villages and towns.

(d) Producers should be organized for marketing (in cooperatives), and in this connection financial and technical aid should be provided.

(9) Livestock

(a) Meat prices should be raised to a suitable level in terms of feed prices.

(b) The increase of feed production should be encouraged.

(c) The exportation of some livestock feeds, bran, and oilcake should be adapted to domestic demand.

(d) Measures should be taken by state farms and the Toprak Mahsulleri Ofisi (x) to meet winter feed requirements.

(e) The output of the Feed Industry should be increased and feed promotion should be undertaken.

(f) Regulations concerning pastures should be reformed.

(g) Raising of animal feed in irrigated areas should be encouraged.

(h) Pasture improvement must be linked to a long term program.

(i) Breeding stock of various types should be imported in a manner to meet requirements and the output of breeding stock should increase as a result of agreements with a larger number of private livestock breeders.

(j) Artificial insemination services, because it is the cheapest method, should be promptly raised to several times the present level.

(k) Activities concerning animal health should be increased, and the personnel, equipment , building, supply , vehicle, and similar needs of the agencies concerned with animal health should be met.

(x) The Government grain buying and selling agency.

(l) Long-term economic, social, administrative, and legal measures should be adopted in order gradually to reduce the number of goats. The Mohair-Wool Corparation (Tiftik Yapagi A.Ş.) should be reformed and reorganized in such a way that it can perform its basic functions.

(10) Forestry

(a) The 143 fire look-out towers and 496 fire cabins existing in 1960 cannot fulfill the fire-fighting needs. The number of these facilities should be increased and communications systems should be set up.

(b) Reforestation both in the forests and outside should be rapidly increased. There should be an annual program for the reforestation of approximately 100,000 hectares.

(c) Forest roads should be improved and at least 2,000 km of new road must be constructed each year.

(d) All regulations concerning forests should be reexamined and improved.

(e) More serious action against illegal intervention and settlment should be taken.

(f) The forest organization should be reinforced with respect to personnel.

(g) Wood cutting practices should be improved by holding short courses for the employees working in wood cutting and saw mill activities.

(h) Measures for the improvement of forest meadows and areas exposed to erosion should be prepared in the form of a long-term program, and present activity should be increased.

(i) The establishment of the industries necessary for the better utilization of forest by-products and waste products should be encouraged.

(j) The General Directorate of Forestry should show more zeal in filling the wood requirements of S.E.K.A. under easier and more favorable terms and in this way decreasing wood imports.

(11) Fishing

(a) The following are needed in order to solve difficulties in the production of fishery products:

(i) Assurance of technological developments such as improvement of the means and systems of production, the creation of preserving and processing facilities (e.g. cold storage and all kinds of canning) and the expansion of existing ones, and the organization of markets.

(ii) The increase in the output of bottom fish and other fishery products along with migratory fish.

(b) An effective organization should be established in order to 1) perform the public services connected with fishing and fishery products, 2) assist from the technical point of view in the determination of the policy which should be followed by the State, 3) administer State enterprises and operations which have the character of public services, 4) implement technical training and research work connected with fishing, 5) fix investment requirement priorities, 6) assist the Government in applying recognized norms in the realization of projects, and 7) concern itself with regulating and supervising the fishing places belonging to the State. At the same time this organization should be made responsible for assuring the necessary coordination among the various government departments and agencies concerned with fishing.

(c) Priority should be given to the adoption of measures to assure the optimum use of existing capacity of the Istanbul Fish Center before entering upon new investments other than those complementary to the refrigerated transportation facilities.

(i) The possibility of insuring fishing vessels and their being accepted as collateral by credit institutions and of instituting a system of credit for boat construction and of installment payments for motors, winches, and electronic equipment should be investigated.

(ii) The regulations concerned with fishing and fish products which are not responsive to present needs should be revised promptly and legislation to promote development should be put into effect.

(iii) In order to develop fishery cooperatives and make them effective, special legislation for fishing cooperatives designed to establish separate cooperatives for producers, traders, and exporters should be prepared and put into effect.

10. THE FOOD, BEVERAGES, AND TOBACCO SECTOR

This sector, which consists of branches of industry processing a large share of the agricultural output of the national economy in countries which still have a predominantly agricultural character, is of great importance both because of its share in the national income and its influence on the social and economic structure.

Because the sector is necessarily composed of small units and is extensive and a large share of agricultural processing in Turkey is in the form of cottage industry, it is difficult to deal with the sector comprehensively. For this reason, only the most important activities in the sector have been studied, such as the sugar industry, the meat industry, the production of milk, the canning industry, beverages, and tobacco.

The most urgent problems are the lack of facilities and means to balance the surplus in the production areas and shortage in the consumption areas, the gap between costs and final selling price, and low prices received by producers because of price distortions and lack of technical knowledge.

The chief deficiencies are the absence of standardization for products which could be exported or are being exported, the failure or inability of producers to attach importance to quality, the lack of inspection of processed goods, and the inadequacy in processing technology.

I. THE SUGAR INDUSTRY

a. THE PRESENT SITUATION

(1) Approximately 210,000 farmers grow sugar beets. Turkey has a capacity to process 25,800 tons of sugar beets per day. Approximately 150,000 **hectares are used for the production** of beets. The land per farmer is 0.792 hectare on the average, and the yearly family income from sugar beets is 2,595.00 TL. At present national per-capita consumption of sugar is 11 kilos.

The trend of production since 1955 is shown in Table 1 below :

TABLE 1

PRODUCTION, CONSUMPTION, STOCKS AND PRICES OF SUGAR

YEAR	PRODUCTION (Tons)	CONSUMPTION (Tons)	END OF YEAR STOCKS (Tons)	EXPORTS (Tons)	AVERAGE SELLING PRICE (T.L.)
1955	254,703	213,464	153,481	6,991	1.60
1956	276,557	245,164	177,865	6,991	1.60
1957	320,500	267,203	203,852	27,275	2.00
1958	349,423	302,904	235,067	15,281	3.00
1959	499,727	283,322	429,033	21,739	3.00
1960	643,498	297,852	575,000	194,323	2.50
(x) 1961	390,000	340,000	365,000	260,000	
(xx) 1962	400,000	360,000		75,000	

Note : The number of plants was 11 until 1955, 15 after 1956.

(x) Estimates
(xx) 1962 program

(2) If the production capacity described above is compared with the actual production, it is apparent that with the same number of plants and with unchanged capacity it has been possible, to increase production by extending the campaign period. As is known, sugar in Turkey is produced from beets. After 1950, planting of beets increased, putting pressure on the capacity of sugar plants and forcing an extension of the campain period.

In the last two years average consumption has been around 300,000 tons. This created an increasing accumulation of stocks and necessitated substantial exports.

b. ESTIMATES FOR 1962

(1) It is estimated that with unchanged prices the consumption of sugar in 1962 will be about 360,000 tons.

(2) Production will be 400,000 tons for 1962. An investment of 15,000,000.00 TL. for new facilities and expansion is envisaged in 1962 in order to meet increased consumption in future years and reduce the campaign period to the optimum duration.

c. PROBLEMS

(1) Exports of sugar under present conditions could be effected at a rate of 22 liras for a dollar. As can be seen from this rate, the high subsidies required preclude exports as a permanent solution.

(2) Sufficient emphasis is not paid to the two by-products of the sugar industry. These by-products are sugarbeet cake and molasses; the cake is used mostly for animal feed and molasses are directly exported or used in the production of alcohol.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) Production of beets must be coordinated with the reduction of sugar production to normal capacity. As the estimate of sugar consumption in 1963 is 385,000 tons, 2,300,000 tons of beets will be needed. This necessitates the use of approximately 115,000 hectares. However, it is understood that the program for 1962 covers the sowing of 141,000 hectares. In that case the Sugar Company must take the necessary measures by adjusting the rotation plan to assure that 25 thousand hectares will be withdrawn from the area now sown.

(2) Export for the liquidation of excess production and inventories were considered for the first time in 1960 and 1961. But the fact that the required subsidies are very high makes the acceptance of exportation for 1962 and subsequent years an exceptional remedy.

(3) It is necessary for the alcohol factories, which at present are working at 2/3 of their capacity, to operate at full capacity in order to utilize the molasses and alcohol which are by-products of sugar. For this reason, by means of the necessary changes in the Monopoly Law, the Sugar Factories must be given the possibility of exporting the surplus alcohol output.

II. MEAT PRESERVATION AND PROCESSING

a. THE PRESENT SITUATION

(1) Production

The meat industry, that is preservation and meat processing, is carried on in three ways :

- Government Sector (Meat and Fish Organization)
- Municipal Slaughterhouses
- Private slaughtering

The approximate amount of slaughtering done by these institutions in 1960 is shown below :

	Slaughtered Animals	Meat (ton)
Meat and Fish Organization	678,650 sheep 72,000 cattle	20,600
Municipal Slaughterhouses	5,800,000 sheep 965,000 cattle	208,000
Private Slaughtering	(exact figures are not available; estimated to be equal to that in Slaughterhouses)	208,000
	TOTAL	436,000

Meat preservation, in the technical sense, is done only in the government sector. The larger slaughterhouses also have cold storage.

As seen from the above figures, yearly meat production in Turkey amounts to 436,000 tons in total and 15.5 kg. per capita.

(2) Quality of the output

In spite of the low level of meat consumption, Turkey has more animals per capita (2.5) than any other country in Europe. The lowness of the meat yield is the reason for this contradiction.

Meat producing animals in Turkey cannot be fed properly, thus causing both the yield and the quality to be low. As a result, a vicious circle is created in which the producers' income declines and the low income in turn causes the producer to be unable to feed his livestock.

b. ESTIMATES FOR 1962

Per capita consumption is low, as has been seen and must be increased because protein consumption in Turkey is low. Even with no increase in per capita consumption the population increase of nearly 3 % annually requires an increase in meat production.

Provided that certain conditions are met, there appear to be export possibilities since meat prices in neighboring countries are higher than in Turkey.

Under present conditions, supply and demand in 1962 will not be much different from 1961.

c. PROBLEMS

Problems limiting production and consumption should be analyzed under 4 headings :

(1) Natural Obstacles

The amount of pasture and meadow land per animal is not sufficient to permit the feeding of livestock. A minimum of 50 - 60 decares of pasture are required per animal, but in Turkey only 12 decares are available. Moreover, the number of unproductive and even harmful animals (such as goats) is high.

(2) Technical Obstacles

(i) The fodder industry is inadequate and the agricultural and industrial residues used in this industry are not efficiently utilized; as a result seven-eighths of animal fodder requirements depend on pasture.

(ii) The meat requirements of big consumption centers are met mostly by transportating live animals from the eastern region by train. Studies show that, under the present transportation system, the animal loses 10 % of its weight in 24 hours and 14-20 % in 48. This results in a total annual loss of 75-100,000,000,00 TL.

(3) Price and Marketing Obstacles

(i) Meat prices are low in view of the protein and food value when compared with other foodstuffs.

(ii) Animals for slaughter in Turkey in most cases are sold by the kilo. When the criterion is live weight, no distinction can be made as to whether the livestock are well-fed or not; that is to say, price is not based on the quality of the meat. Livestock prices are not at a level to encourage feeding, for there is no difference between the outlay needed to assure the additional carcass weight and the resulting additional income.

(iii) Although meat prices are low, the fact that meat animals pass through many hands between producer and consumer opens the way to a significant part of the price paid by consumers going to speculators instead of to produces.

(iv) The livestock markets are disorganized. Traders and commission agents manipulate prices to the disadvantage of producers by using sometimes kilograms and sometimes lump-sum in purchasing and also exert an influence on sales prices which is unfavorable to the consumer.

(4) Exports

The present surplus in the livestock population and the limited feeding possibilities make the encouragement of exports necessary. Meat can be exported either in the form of live animals or frozen. Turkey has a price advantage in exporting livestock. However, because world prices for frozen meat are low, competition in this field is difficult.

In the export of live animals, however difficulties are encountered for the following reasons :

(i) Livestock diseases: For Turkey to be able to export livestock to importing countries it is necessary that no livestock disease should have occurred in Turkey for at least 8 months.

(ii) In connection with the factors which hamper livestock feeding the low quality of meat is another reason for the small demand for Turkish meat.

(iii) Another factor affecting both exports and domestic production is smuggling. In normal years smuggling takes the place of exports which cannot be realized, and indeed smuggling is preferred to export.

(5) Government Sector

The Government has entered the slaughtering and meat preserving industry in order to remove the defects noted above.

The Meat and Fish Organization, which represents the Government, was established in 1952 with the responsibility of creating organizations and institutions which could improve meat production and, by virtue of its authority to buy and sell, put the internal market in order and administer the export of live animals.

But because the initial studies made with the help of foreign experts were somewhat over-optimistic, and the role played in the sector by private enterprise was reduced, the activities and the related by-product processing capacity of the enterprise were planned on a very big scale.

As a result, four large meat plants were established in Istanbul Ankara, Erzurum and Konya and 23 cold storage and freezing installations were set up in various places. Private enterprise participates in four of the cold storage depots.

The Organization has also participated in 15 stores, a fish oil plant in Trabzon, a fish net factory in Istanbul, and in 23 enterprises of which only two are profitable.

Meat packing plants are presently working below capacity. Although these plants have had a slaughtering capacity of 109,000 tons per year since 1956, production figures given by the Meat and Fish Organization show that output was 41,710 tons in 1959 and fell to 20,630 tons in 1960. That is, four-fifths of slaughetering capacity is not being utilized.

The capacity and current situation in municipal slaughterhouses and similar slaughtering places other than the Organization is as follows :

Slaughterhouse capacity at the beginning of 1961 was 12,400,000 sheep and 2,350,000 cattle, or a total of 483,000 tons; actual slaughtering in 1960 was 5,800,000 . sheep and 965,000 cattle, or 208,000 tons.

According to past experience, slaughtering outside of the slaughterhouses is of equal magnitude, that is aproximately 6,500,000 head are killed privately.

As can be seen, the Meat and Fish Organization with its 20,630 tons (in 1960 which was a normal slaughtering year) accounts for 5 % of total slaughtering. If it operated at full capacity, its share could rise to 25 %.

Freezing and cold storage facilities, which should occupy an important place in meat processing and distribution, did not operate profitably as a result of idle capacity in the plants. Assurance of the full utilization of these depots is possible only with a cold chain or refrigerated transportation facilities to connect them with distant consumption centers.

It is apparent from the above explanation that the organization has difficulty in performing its function of organizing the internal market on account of the limited position it actually occupies in the industry.

In addition, in comparison with private enterprise the Organization suffers from the following financial handicaps :

(i) Private enterprises come into the market and buy heavily when livestock prices are low , however, when prices are high they withdraw from the market and leave the Meat and Fish Organization with the responsibility of assuring meat to retailers.

(ii) It is obliged to pay a 5 % premium for animals of good quality.

(iii) On account of the extent of its organization, its overhead expenses are heavy.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) In order to increase domestic production and remove export difficulties it is necessary to expedite the campaign against diseases and competely eliminate them. To this end the necessary measures should be taken, especially increasing the number of veterinarians and establishing the Ankara Foot-and-Mouth Disease Institute.

(2) The lack of prepared feed for livestock, together with the present inadequacy of pastures, is causing livestock strains to deteriorate and grow smaller.

To compensate for this situation, expensive remedies such as artificial insemination and importation of breeding stock are employed in order toimprove breeds.

Today we are confronted with two problems concerning fodder :

(a) Producers are not accustomed to using feed.

(b) Fodder prices seem high.

Molasses, a by-product of the Sugar Factories, are given free of charge to farmers. However, molasses must be dried. The Sugar Factories have four drying installations. One of these (Erzurum) is in operation. The peasant does not take dried molasses because he would be obliged to pay for it.

In order to lower fodder prices, it is necessary to make use of all industrial by-products and waste. This too requires organization.

(3) Consumption of frozen meat

Today consumers prefer fresh meat. In order to solve the problems mentioned above it is necessary to encourage the consumption of frozen meat. Therefore :

(a) Meat should be frozen by the quick-freeze system.

(b) Frozen meat must be consumed within 12-18 months at most.

(c) The thawing of meat due to changes in temperature during transportation should be eliminated, and subsequent refreezing must be prevented.

(d) Meat must stand for 24 hours before it is made available to the consumer. Marketing functions should be arranged in such a fashion as to make this possible. Provided the demand for frozen meat can be promoted in this manner the following advantages would exist in the conversion of consumers to frozen meat :

(i) Frozen meat can be sold more cheaply because the Meat and Fish Organization will be freed of the necessity of adjusting its slaughtering to consumption and will be able to purchase livestock when the price is low and when the animals are relatively well-fed, i.e. in the autumn before winter sets in.

Because such a price difference will make possible an increase in the consumption of frozen meat on account of its lower price, the Meat and Fish Organization will not suffer losses.

(ii) If it is necessary for meat prices to rise for the reasons already given, the adverse effects of the price increase will be minimized by keeping frozen meat prices at or slightly below the present level and increasing only fresh meat prices.

(iii) Increased consumption of frozen meat would eliminate the loss that occurs in transporting live animals from distant producing regions. However, for this it is necessary to assure the construction of meat plants in producing regions and cold storage depots and the completion of the " cold chain " of refrigarated transport equipment to connect them.

(iv) Because of such an increase in the slaughtering capacity of the Meat and Fish Organization, it will be possible to make better use of the by-products such as blood, bone, intestine, and hooves.

The better use of these by-products both in related industries and as exports must be studied.

For the frozen meat system to function, however, it is essential that 1) the Meat and Fish Organization's purchase price for live animals be fixed by a qualified commission at a level above the present one, that 2) sales prices be readjusted according to quality and yield, and that 3) the distribution of meat to butchers in the major consumption centers be performed by the Meat and Fish Organization.

(d) The 15,000,000.00TL.credit allocated from counterpart funds to encourage animal feeding cannot be completely utilised at present for the purpose intended due to the low procurement process paid by the Meat and Fish Organisation. ICA,however, set up this credit with the stipulation that the full amount be used for such purposes as preventing lamb slaughter, etc.

In this situation there are three alternatives to assure that this credit be effective :

(i) Increasing procurement prices

(ii) Liberating purchase prices by accepting market prices as a basis.

(iii) Removing the obligation to sell to the Meat and Fish Organisation.

(e) Investments in this area pertain chiefly to livestock and the prevention of animal disease (e.g. establishment of the Ankara Foot-and-Mouth Disease Institute) and are only indirectly connected with this sector.

In this connection it will be useful to touch on the postponed investments in the meat sector from the point of view of their connection with the " cold chain " .

Among the investments started by the Meat and Fish Organization and later halted by the Committee of Under-Secretaries mention must be made of three meat plants, two cold storage depots, and a cannery.

Construction of meat and fish plants in Elaziğ, Kayseri, and Samsun is being considered; each plant will cost 16,000,000.00 TL.of which 6,000,000.00TL. is foreign exchange.

The cold storage depots which were considered for Diyarbakir and Inebolu would cost 6,000,000.00 and 2,300,000.00 TL, respectively, while the establishment of a cannery in Biga would cost 4.3 million TL.

The postponement of these investments is appropriate in view of the present unused capacity of the Meat and Fish Organization. However, if the entire system could be examined at the same time,these aspects might be reconsidered.

III. MILK AND MILK PRODUCTS

a. THE PRESENT SITUATION

(1) Production

Almost all the farm families who comprise the great majority of the Turkish population, raise some milk animals, and, according to existing opportunities and regional conditions, make use of their output. Of the more than 65 million existing animals the average of milk producing animals in recent years is as follows :

Cows	3,500,000
Buffaloes	400,000
Sheep	15,000,000
Goats	10,000,000

Milk production varied between 3,500,000 and 5,000,000 tons in recent years and according to a survey in 1959, the production was 4,900,000 tons.

The value of this amount of milk varies between 3 and 4 billion TL and constitutes 15.% of the total agricultural income.

Annual milk output per cow in Turkey averages about 500 kg., and does not exceed 2.5 - 3 kg. daily; this amount is very low in relation to the productive capabilities of the existing livestock . The real reason for this is that the milk which is produced is not marketed continuously and at stable prices, and since the producer therefore has no economic incentive he does not take care of, shelter, or feed his livestock properly.

(2) Distribution of the Output

In Turkey the distribution of milk production is inconsistent with consumption both seasonally and geographically. Milk production is at its lowest level during winter months when consumption is high and reaches its peak during March, April, May, and June when consumption drops. In the major consumption centers, however, production is far below consumption.

So in some areas milk and dairy products are scarce while in others they are abundant.

Since milk is a perishable product it cannot be brought as milk or yoghurt to consumption centers beyond a certain limit.

Thus it may be offered to consumers in distant markets in the form of various cheeses and butter. In spite of this it is impossible to meet the fluid milk requirements of places in which demand is high in relation to production. However, this is possible with sterilized milk, condensed milk, and milk powder. In order to be able to meet requirements everywhere in an orderly manner it is essential to establish, with government intervention, a milk and milk products industry and then assure the development and improvement of this operation in the hands of the private sector.

(3) Utilization of the output

Although it has not been possible to determine definitely how much of the milk produced in Turkey is marketed and how much is processed it is estimated that the portion consumed by the producers is one-third. The breakdown of the two-thirds marketed is as follows :

	%
Fluid milk and yogurt	30
butter (the residue left after extraction of butterfat is used in cheese production)	65
full-fat cheese	5

Much of the processing takes place in homes or with very primitive methods and equipment; an insignificant portion, however, is processed in factories. In fact the amount of milk processed in 1,626 milk processing plants in 1959 was only 417,000 tons out of 4,900,000 tons of total milk production.

None of these facilities (except the Atatürk Orman Çiftliği plant near Ankara with a daily capacity of 30 tons) conforms to technological and sanitary conditions.

b. PROBLEMS

(1) Problems relating to milk production :

(i) Due to lack of a constant demand for milk at stable prices, producers do not properly feed and protect dairy animals and milk production cannot be encouraged.

(ii) Because of the export of good animal feeds such as cereal husks and oil cakes the price of these feeds is rising and the amount remaining in Turkey is diminishing.

(iii) The raising of dairy breeding stock from good quality domestic or foreign strains and the distribution of the progeny to producers are inadequate.

(2) Problems relating to processing :

  (i) Scientific and sanitary facilities have not been established to transform milk produced by farmers to a condition suitable for consumers (pasteurized, sterilized and condensed milk) and to process dairy products (yogurt, cheese, butter, milk powder) .

  (ii) A regulatory body composed of qualified and specialized personnel is lacking.

  (iii) Credit facilities to provide initial capital are not available.

  (iv) The quality of milk and milk products has not been standardized.

  (v) Rules and regulations relating to the machinery, equipment, and tools of milk and milk products plants, their special features and operating techniques, do not exist and there is no technical personnel.

(3) The price problem :

Price has not been determined according to the quality of milk and dairy products. Current prices differ from region to region but are far from being satisfactory for the producer. This situation is one of the reasons for the low quality of milk (e.g. the removal of butter fat from milk and the addition of water.) But the determination of prices depends upon the prior regulation and supervision of standards; otherwise the consumer will suffer.

c. SUGGESTIONS AND RECOMMENDATIONS

It is necessary to give importance to the milk products industry in order to utilize milk production, prevent waste of this valuable product, and assure adjustment between production and consumption.

Since improvement of existing inadequate facilities is very difficult the establishment of new plants is essential.

The most suitable way to do this is to initiate joint enterprises in the various milk-producing regions of Turkey by the government sector acting in concert with private enterprise and subsequently to transfer this operation to the private sector; as a first step studies should be started for a plant to be established by Atatürk Orman Ç. with the participation of private capital in a suitable producing region.

The following points should be taken into consideration in establishing these facilities :

(1) The operation of milk products plants must be oriented toward a variety of products.

(2) At present milk powder is produced by the cylindrical method. But in this process some vitamins are lost and because sediment is collected and the product does not conform to food regulations. New plants should be based on the spray process rather than the cylindrical or rolling method.

The only use of milk powder produced by the cylindrical method in the world is raw material for animal feeds. Therefore, existing facilities of this type should be used in regions where milk is cheap.

(3) Since 1950 UNICEF has been trying to establish a dairy products industry in countries that have a protein scarcity. In 1953 Turkey benefited. from this assistance in establishing the Atatürk Orman Ç. plant. Efforts should be made to take maximum advantage of these opportunities.

(4) The milk products standardization being carried out by FAO parallel to the European food code should be adopted. In the revision of Turkey's food regulations this aspect must be given attention and new investments made in such a way that they will conform to the standardization code .

IV. THE FRUIT, VEGETABLES, and FISH CANNING INDUSTRY

a. THE PRESENT SITUATION

(1) Production

According to figures for 1957, 1958, and 1959, production in this field shows a slight decline in terms of quantity in fruit and vegetables, and a larger decrease in fish canning. This decline is especially conspicuous in 1959.

Fruit and Vegetable Canning

	Quantity (1,000 number)	Value (1,000 TL.)
1957	9400 cans and 2210 kg.	21,000.00
1958	8466 cans and 2331 kg.	21,080.00
1959	8703 cans and 1412 kg.	23,310.00

Fish canning

1957	4435 cans and 887 kg.	6,493.00
1958	6775 cans and 82 kg.	6,080.00
1959	3030 cans and 184 kg.	3,960.00

The value figures are based on factory cost. In order to find the sales value in the market, the value figures for canned fruit and vegetable should be multiplied by approximately 1.5 and for canned fish by 2. No reason is known for the decrease in fish canning. But in the years when fish production is high processing is substantial and then gradually declines until stocks are reduced. The decrease in 1959 can be explained as the low point in a periodic cycle.

(2) Capacity

Annual fruit and vegetable canning capacity is 37,000 tons and around 111,000,000.00 TL. in value; in fish canning it is 12,311 tons and 61,500,000.00 TL. in value. According to available figures no addition to capacity has been made since 1957. 23 out of the 68 existing canning factories process only fruit and vegetables; the rest can both fish and fruit and vegetables.

Fourteen plants have an annual production capacity in excess of 1,000,000 cans; only these can be considered factories. Twenty plants have a capacity of between 500,000 and 1,000,000 cans. Those with a capacity of less than 500,000 cans, the third group, are essentially workshops.

If the capacity figures given above are compared, especially in terms of value, it is apparent that capacity is three times actual production. This is the result of the fact that some of these enterprises, especially the smaller ones, are not genuine organizations. In other words, because until recently imported raw and auxiliary materials were scarce and subject to allocation, the sole function of these organizations was to obtain these scarce materials, especially tin-plate, and resell at a profit to bigger factories.

b. PROBLEMS

Opportunities for better utilization can be considered under three headings :

(1) In years of high production of fruit, vegetable, and fish, the surplus remaining after consumption of fresh products could be canned.

Despite existing excess capacity and low prices in producing regions canning does not increase in years of surplus produce. For instance, when the peach crop in Bursa is plentiful, the utilization of the surplus by canning cannot be carried out, because :

(i) The capital of existing plants and workshops is inadequate. Generally, manufacturers in Turkey, after obtaining their fixed capital, go into business without obtaining working capital and encounter great operating difficulties.

(ii) For the reasons explained above a number of the enterprises whose capacity has been stated, in fact, a large portion in terms of numbers, do not actually operate. Those which are in operation, however, have old machinery and are not able to work at full capacity.

(iii) Even if all these difficulties were overcome, the internal demand is limited by the high prices and, for reasons to be explained below, export possibilities are negligible. The chief reasons for the high internal prices are the following :

(aa) The high cost of auxiliary raw materials (sugar, tinplate, tin).

(bb) Difficulties and delays in obtaining these materials especially those which are imported.

(cc) The public is not accustomed to canned goods.

(2) Obstacles to increasing sales of canned foods in internal and external markets and especially in promoting exports :

(i) Canning is far from meeting even minimum standards, i.e. the quality is very low.

The inadequacy begins with the raw materials. The produce is not sound, standardized, or suitable for canning. Proper care is not given in gathering it. Secondly, technical conditions in processing are not satisfactory. Shortcomings in packing, i.e. in canning, are quite well known.

(ii) There is no demand for Turkish canned foods in foreign countries. This means that even if the quality defects outlined above were eliminated Turkish products would not appeal to foreign consumers on account of the large amount of sugar used in canned fruits and of the salt and oil in canned fish.

(3) General deficiencies

Technical knowledge and personnel are the most important deficiencies, and even in relatively large plants they are not available. Moreover the weakness of the supervisory possibilities further aggravates the problem. Even if supervision did exist, the enforcement is too weak to assure implementation and observation of the conditions necessary for conformity with the food regulations in this type of establishment.

c. SUGGESTIONS AND RECOMMENDATIONS

(1) The machinery and auxiliary materials requirements of the plants should be met in sufficient amounts and at suitable prices.

(2) The supervision to assure standardization of production should be performed and enforcement of food regulations should be strengthened.

(3) Export possibilities should be investigated and measures for encouragement adopted.

V. THE BEVERAGES AND TOBACCO PRODUCTS MANUFACTURING INDUSTRY

a. THE PRESENT SITUATION

(1) The Tea Manufacturing Industry

Tea production in terms of both capacity and actual output shows a continuous increase. Fresh leaf processing capacity, which was 70 ton daily in 1955, increased gradually, reaching 320 tons in 1959, and 1,070 tons in 1960. Actual production shows a parallel increase, the amount of dry tea processed, which was 1,190 tons in 1955, rose to 4,153 in 1956 and to 5,710 in 1960.

The 5,710 ton production corresponds to a campaign period beginning in May and lasting seven months. However, because tea leaves are very delicate they must be processed within 24 hours of being gathered. Therefore, if the capacity is not adjusted to the peak during the campaign period, i.e. according to the amount entering the plant, the volume of output drops and the quality is spoiled because of the deterioration of the leaves.

For this reason the expansion of existing factories and new investments are needed. Provided these investments are realized, production will increase and it will become possible to reduce imports of dry tea which are now 5,000 tons per annum. In fact, an importation equal to 25 % of production is necessary for blending purposes. But at present imports amount to 50 %. Provided production increases, tea exports will be possible along with importation for blending.

(2) Alcoholic Beverages

The production capacity, actual production, and consumption situation is as follows :

(a) Suma :

The production capacity for suma, the raw material from which raki (x) is made, was 4,600,000 liters in 1958 and has now reached 6,100,000 liters.

Actual production has increased gradually and reached 6,700,000 liters in 1959. 1960 production was 5,400,000 liters. Thus production fluctuates around capacity.

Suma consumption depends on raki production. The 1960 decline paralleled the decrease in raki production.

(x) Raki is an anise-flavored alcoholic drink made from grapes.

(b) Pure Alcohol

According to figures of the Monopolies Administration, alcohol production, the capacity of which was about 4,300,000 liters for the last years, has increased parallel to consumption, this trend was accelerated in 1959 - 60 and production reached 14,500,000 liters. To assure this production which, as is apparent, is substantially above capacity, the Monopolies Admininstration has purchased raw or pure spirits from the Sugar Company.

(c) Raki :

According to available figures, raki is one of the two branches in which production is lower than the capacity. (The other one is wine.)

In 1958 capacity was increased from 9,500,000 liters annually to 12,300,000 Although production has continually increased following closely the consumption trend, it has not reached a level justifying this increase in capacity. In fact consumption reached a peak of 7,300,000 liters in 1959 and fell to 5,100,000 in 1960.

(d) Wine :

Although production capacity of the Monopolies is approximately 14,000,000 liters production for a long time was half of this capacity but increased sharply to 9,000,000 liters in 1958 and 12,400,000 in 1959. In 1960, however, production fell suddenly to 5,000,000 liters. The reason for the above-mentioned sudden increase in production emerges if one takes into account that wine production does not closely follow demand as other drinks, that stocks are built up for the years ahead, and other necessities.

Nevertheless demand for wine is low as is confirmed by the sharp decline in 1960. In fact a decline on the same scale has taken place in the production of private wine producers; production, which was 21,000,000 liters in 1959, dropped to 12,400,000 in 1960.

The low level of wine demand stems from three reasons one of which is of a permanent character:

(i) The permanent reason is that, because of religious beliefs, the public does not approve of wine.

(ii) The increase in the price of wine in 1958, which reached 117 %, had an adverse effect on consumption.

(iii) Advertising and promotional activity on this subject are inadequate.

(e) Beer :

Production capacity was increased to 20,000,000 liters in 1954; production, however, is 30,000,000 liters and cannot meet consumption in spite of operating capacity.

Hops, an ingredient in the production of beer, is at present imported. In 1942 studies were made by the Monopolies Administration concerning growing hops in Turkey and slopes in the Bolu region were found suitable for planting.

Current imports are 60 tons amounting to 600,000.00 TL. Although the foreign exchange expenditure for this purpose is small, it is a project which must be undertaken because it will assure an increase in income, however small, to the producer instead of costing foreign exchange.

(3) Miscellaneous Drinks

Production capacity rose from 1,100,000 liters to 3,100,000 in 1957. The level of production in this branch of activity shows a continuous increase : 2,100,000 liters in 1959 and 2,800,000 in 1960, indicating that capacity is sufficient to meet production.

(4) Tobacco Leaf Manipulation

The capacity of manipulation facilities of the Monopolies Administration is 30,000 tons. When capacity is exceeded in years when production and consequently Monopolies purchases are very high, use is made of work places belonging to the private sector. The annual capacity of these seasonal work places is 20,000 tons.

The course of production in recent years has been as follows :

1955 : 19,000 tons
1956 : 47,000 "
1957 : 38,000 "
1958 : 37,000 "
1959 : 34,000 "
1960 : 54,000 "

There is no problem concerning capacity. But the following obstacles to the processing and export of leaf tobacco have been noted :

(a) After the tobacco leaves have been dried by the producer,the exporter classifies the tobacco he has purchased; that is to say, after being subjected to a second or standardization operation, they are exported. There is no regulation for fixing the yield in this second step. For this reason different merchants use yields of 80, 70, or 60 in exporting tobacco.

(b) The fact that the Monopolies Administration is the sole purchaser is a significant problem for the tobacco crop of Southeastern Anatolia; on account of the transportation difficulties of the region this function cannot be performed as it should be and for the same reason private traders do not consider the area.

Moreover, the Eastern tobacco market usually opens rather late, and therefore, the Monopolies cannot completely check and purchase the crop.

(c) After the Second World War a gradually increasing trend toward Virginia type tobacco developed in European markets. In the face of the declining demand for Oriental tobacco, it is essential that the necessary studies be made in Turkey in areas suitable for the cultivation of Virginia tobacco.

(5) The Manufacture of Cigarettes and Similar Products

The annual capacity in the industrial branch referred to as the tobacco industry is 38,000 tons. Actual production in the period of 1957 - 1960 fluctuated around 29,000 tons.

Cigarette exports are negligible. Export possibilities depend on both a change in the form of manufacture and on considerable effort to enter markets already occupied.

b. SUGGESTIONS AND RECOMMENDATIONS

(1) Tea processing plants should be raised to a level at which they can meet requirements; also necessary coordination between cultivation and manufacturing stages should be provided.

(2) Tea cultivation, like tobacco, should be placed under the administration and guidance of the Monopolies.

(3) Raki and wine production is below capacity. Exports should be increased.

(4) New breweries should be established; the hops used in brewing should be cultivated in Turkey and its importation prevented.

(5) In order to raise the quality of leaf tobacco and promote exports, manipulation should be regulated and standards fixed.

(6) Studies necessary for raising Virginia type tobacco should be made.

(7) The study completed by the Ministry of Agriculture concerning the cultivation of cork oak must be implemented by the Monopolies Administration.

11. TOURISM

a. THE PRESENT SITUATION

(1) The table below shows the number of foreigners who have come to Turkey each year during the period 1954-1960. The number of tourists per year was found by deducting from this total foreigners who came to Turkey to work or settle, students, and those who stayed in Turkey less than 24 hours.

NUMBER OF FOREIGNERS and

FOREIGN TOURISTS COMING TO TURKEY

YEAR	FOREIGNERS (in thousands)	FOREIGN TOURISTS (in thousands)
1954	112	76
1955	107	73
1956	158	92
1957	159	93
1958	153	95
1959	166	113
1960	124	92

The greatest number of tourists enumerated in Turkey, including those persons whose reasons for coming are not known, was around 113,000 in 1959.

(2) The available statistical data shows that the number of tourists that Turkey receives is less than most of the neighbouring countries.

(3) According to the information available, the period tourists spend in Turkey varies between 3 and 11 days.

(4) Each tourist leaves, on the average, about 12 dollars of foreign exchange in Turkey.

Although the number of tourists who have visited Turkey has shown irregular variations, according to available statistics a rising trend is apparent.

It is estimated that the number of tourists who will want to visit Turkey will increase 30 per cent in the coming years. However, the realization of such a demand depends on the provision and supply of certain touristic services.

b. PROBLEMS

(1) As to lodging facilities, the hotels, motels, pensions etc. where tourists can stay and the number of beds at such places are not precisely known. A survey made in 1959 puts the number of beds at 6,163. This figure is inadequate both quantitatively and from the point of view of location.

Various attempts have been initiated since 1959 by both private enterprise and the state to increase the number of lodging facilities. However, it is doubtful that many of these efforts will have a significant effect on the development of tourism because they are mostly concentrated in the cities and are far from satisfactory from the point of view of construction materials used and service.

(2) Potential touristic attractions such as fishing and hunting, thermal springs and spas, and the rich folklore have not been opened up for the enjoyment of foreign tourists.

c. SUGGESTIONS AND RECOMMENDATIONS

(1) A broad tourism market and motivation study should be made concerning tourists who might come to Turkey, including information as to their income group, nationality, conceptions about Turkey, travel objectives, and probable duration of stay. Thus, bearing in mind the income level of future tourists and their objectives and the location of regional and urban attractions, the construction and equipment of all kinds of lodging facilities, amusement places, and other auxiliary touristic facilities and their location should be determined so as to meet the probable touristic demand.

(2) It will be appropriate to give strong encouragement to foreign capital investing in tourism. In this connection, ways should be sought for the oil companies to establish restaurants, motels, and places for selling domestic handcrafts and other objects which tourists want next to service stations or at suitable locations along the routes.

(3) To facilitate the construction of new lodging places (hotels, motels, camping sites, etc.) and the modernization of existing ones, present credit possibilities should be expanded and credit allocations, interest terms, and the forms of payment should be facilitated as they are in foreign countries. To finance these investments use should be made of the funds of the Vakiflar Bankasi (Bank for Religious Endowments), the Pension Fund, the Workers Insurance Fund, and the Tourism Bank, in accordance with considerations of profitability.

(4). The Ministry of Press, Radio, and Tourism should be reorganized so that it can perform effectively such functions as (a) determining the information, propaganda, education, capital and credit needs of tourism, (b) supervising the formulation of projects, (c) establishing and supervising standards, and (d) assuring coordination between government departments and agencies on touristic matters.

(5) The most important problem for tourism is to assure the establishment of an organization which will bring tourists from their own country to Turkey within the framework of a definite program. This should be done either by means of foreign capital participating in the tourism industry or directly by means of our own tourist companies. It is known that a large part of the tourists coming to Turkey are brought for a short period to Turkey's touristic districts by travel agents of nearby countries which the tourists visit. In other words, Turkey's touristic attractions are being exploited by neighboring countries. This situation is apparent in Çanakkale (Dardanelles) and Marmaris.

(6) The local firm of Tusan is trying to complete for the 1962 season facilities for Touristic Tour I comprising the Aegean coast. In order to expedite the prompt execution of the administrative work necessary for the realization of this project(including the completion of the small unfinished parts of the Marmaris earthquake houses) and expedite its implementation, use should be made of the allocation for tourism and if necessary of the TL.50,000,000.00 allocation which has been requested for the Iller Bank credit fund.

SECTION THREE

SOCIAL PROBLEMS

1. MANPOWER PLANNING AND EDUCATION (x)

a. THE PRESENT SITUATION

The distribution of the active population in the 15 - 64 age group in the major economic sectors is as follows :

(1,000)

	1945	1950	1955	1961 (xx)
Agriculture	6,350	8,435	9,495	11,600
Industry	560	745	990	1,250
Trade and Services	500	840	1,135	1,530
TOTAL	7,410	10,020	11,620	14,380

(1) According to some calculations the disguised unemployment figure in agriculture for 1958 is around 3.5 million. An increase might be expected in this figure for 1961.

(2) Labor force in industry :

	Number	%
Manufacturing Industry	950,000	76.0
Construction	230,000	18.5
Mining and Quarrying	70,000	5.5
TOTAL	1,250,000	100.0

(x) A new report, " Present Manpower Situation in Turkey and Requirements, 1960 - 1975 " containing more recent and more complete information has just been released by the SPO.

(xx) 1945, 1950 and 1955 census figures have been taken as a base and 1961 figures have been obtained by projections assuming that the same rate of development will continue.

The functional distribution of the labor force in the Manufacturing Industry is as follows :

	Number	%
Laborers	810,000	85.0
Foremen	61,000	6.5
Engineers	2,400	0.5
Clerical and service personnel	77,000	8.0
	950,400	100.0

(3) The total labor force in trade and services is 1,530,000 in 1961. 1,093,000 of this is in the private sector and 437,000 in the public sector.

The functional distribution of the labor force in trade and services is as follows :

	Private Sector	%	Public Sector	%	Total	%
Administrative personnel	60,000	5.5	12,000	2.5	72,000	5.0
Professional and technical personnel	55,000	5.0	90,000	20.5 (x)	145,000	9.5
Clerical personnel	536,000	49.0	144,000	33.0	680,000	44.5
Lower level technical personnel	27,000	2.5	35,000	8.0	62,000	4.0
Laborers and service personnel	415,000	38.0	156,000	36.0	571,000	37.0
TOTAL	1,093,000	100.0	437,000	100.0	1,530,000	100.0

(x) Teachers are included in this figure.

b. ESTIMATES FOR 1962

(1) Projected additional manpower requirements for 1962 in the various sectors are estimated as follows :

(a) Manufacturing Industry

Laborers	80,000	(including 16,000 skilled laborers)
Foremen	6,100	
Engineers	260	
Clerical and service personnel	8,000	
TOTAL	94,360	

(b)

Additional labor force in Mining and Quarrying	2,000
Additional labor force in Construction	7,000
Total for the Industrial Sector is :	103,360

These are only estimates. It was not possible to make detailed calculations.

(c) Additional 1962 requirements in trade and services

	Private Sector	Public Sector	Total
Administrators	3,000	2,000	5,000
Professional and technical personnel	3,000	9,000	12,000
Clerical personnel	15,000	—(x)	15,000
Lower level technical personnel	1,000	2,000	3,000
Laborers and service personnel	20,000	5,000	25,000
TOTAL	42,000	18,000	60,000

(x) It was assumed that the number of clerical personnel in 1961 will be able to meet the 1962 requirements.

(2) Ways of meeting the requirements :

(a) Educational Institutions

The following will be the number of graduates from the various educational institutions in 1962.

Primary schools	270,000
Middle schools	39,000
Middle technical schools	10,000
Lycées	15,000
Technical lycées	7,000
Universities and other institutions for higher education	5,000

The following Table shows the number of 1962 graduates who will enter the labor force and school drop-outs at various levels who will be added to the labor force :

Educational Institutions	Graduates joining the labor force	Drop-outs joining the labor force
Middle schools	7,000	12,000
Middle technical schools	6,000	3,000
Lycées and equivalent technical schools	6,000	4,000
Universities	5,000	3,000

(b) On-the-job training :

Detailed information on this subject does not exist. On the basis of inquiries the number of people trained in this way is thought to be very small.

(3) The balance of supply and demand :

The 1962 labor force demand in the various sectors and the corresponding supply produced by the different levels of educational institutions are as follows :

Functional type	Demand	Supply	Type of Educational Institution
Skilled laborers	23,000	9,000	Middle technical schools
Foremen and technicians	4,000	3,000	Technical schools at lycée level
Clerical personnel	15,000	25,000	Middle schools and lycées, Commercial schools, and other schools of higher education teaching social sciences.
Professional and technical personnel	12,000	5,000	Universities and other schools of higher learning.

The high and low level technical personnel requirements in construction and mining for 1962 are not included in these figures. Therefore, the actual demand for skilled laborers and foremen is certainly over 23,000 . However, it is difficult to estimate how much of this figure can be covered by on-the-job training and in other ways.

If the construction and extractive industries are taken into account, there is a technician and foremen gap of more than 1,000. Since it is quite difficult and takes long to train personnel in this category, this gap is expected to create problems.

26,000 people will join the labor force from middle schools and lycées. Their educational background prepares these people only for clerical work. If the graduates and drop-outs (1,400) of higher educational institutions teaching social sciences and the graduates and drop-outs of commercial schools are added to this figure, the total supply of clerical personnel will be around 27,000. The demand is around 5,000 . Thus, it is apparent that there is no problem in meeting the demand for clerical personnel; on the contrary there is a surplus of over 20,000.

c. PROBLEMS

(1) The teacher situation

The graduates of all the teacher training schools will be approximately 4,000 in 1962. This number is just enough to cover the 5 % attrition rate of the present 64,000 teachers. However, a great number of primary school teachers is required in 1962 just to raise the percentage of primary school age children actually going to school from 63% in 1960 to at least 66% in 1962. Besides this, as can be seen from the above analysis, the present educational institutions cannot meet the labor force requirements for trained personnel of various types, especially technicians. To train this additional personnel it is necessary to have more teachers. The total number for 1962 is over 8,000.

Thus the training of teachers is a critical situation which must be given priority.

(2) Agricultural training

Only 750 students graduate from agricultural schools each year. Considering that 80 % of the total labor force is in agriculture, it becomes very clear that the training of agricultural technicians has been greatly neglected. 200,000 graduates and dropouts of primary schools do not continue their schooling. If the 12,000 dropouts of general middle schools is added to this figure, it is apparent that 212,000 people of the 12 - 16 year age group join the laborforce, especially in agriculture, without any skills. The training of these people will assure that the neglected demand for agricultural technicians is met and that productivity in agriculture will be raised.

(3) Need for technicians

At present in Turkey there is no class of technicians to fill the gap between engineers and foremen. In a study of the State Economic Enterprises it was discovered that there is one technician for eight engineers in manufacturing industry and one technician for two engineers in extractive industries and in the trade and services sector. This ratio is just the opposite in more developed countries, where there are 4, 6, or 8 technicians for each engineer. This situation demonstrates that the need for technicians is a critical problem.

(4) The improper use of technicians

Because the graduates of various levels of vocational and technical schools cannot fulfill functions of the type expected of them, they cannot be used in these positions. The educational system in these schools does not prepare their graduates. Results of the study related to the State Economic Enterprises might be cited as an example. 7 % of those working in State Economic Enterprises in the trade and services sector are graduates of vocational technical schools; however, those working as technicians, foremen, and skilled workers constitute only 3 % of the total.

d. SUGGESTIONS AND RECOMMENDATIONS

(1) Short-term measures

(a) It is necessary to give priority to teacher training institutions in order to meet the teacher shortage. Also, measures must be taken to make better use of the graduates of teacher training schools.

(b) Priority should also be given to opening schools or short-term courses to assure the necessary agricultural training to the 12 - 16 year age group. The training of agricultural technicians must be regarded as an important element in technical education.

(c) The present technical schools are very far from meeting the demand for technicians. To meet this situation, consideration should be given to opening short-term technical schools, especially after lycée, in order to train technicians to fill the gap between engineers and foremen. This will assure that the numerous lycée graduates who, unable to enter university, remain idle will rapidly acquire a profession and will be added to the labor force.

(d) In 1962 better use could be made of some of the technical personnel, especially in the public sector; this will fill some important gaps. Consideration should be given to imparting a more practical orientation to the educational programs of these institutions in order to avoid the use of technicians in administrative work and to insure that the graduates of technical education institutions be used in appropriate jobs. Measures must be taken to transfer idle technical personnel in certain fields to areas where there is a shortage.

There is no problem for clerical personnel in 1962 in the public sector. However, there is an unbalanced distribution among various regions. Attention should be given to transferring clerical personnel in places where the number is in excess of the need to places where there is a shortage.

In both cases a short reorientation program is necessary.

Measures should also be taken to prevent the transfer of specially trained personnel from the public sector to the private sector due to low salaries.

(e) As regards the need for low-level technicians, efforts should be made to fill the gap with short-term and intensive training programs.

(f) The number and circumstances of technicians going to foreign countries should be carefully followed and the results studied.

(2) Long-term Measures

(a) On-the-job training is as important as formal training. This should be analyzed and planned in a systematic way. There are many aspects of the problem. It is necessary to give priority to research in this area and establish a suitable mechanism. In this respect consideration should be given to alternatives such as having a central organization (the Ministry of Education, Labor or Industry or the Interministerial Productivity Center) take up this problem and provide organization and leadership in various sectors, or merely assuring certain legal measures.

(b) Enlisted men who acquire special skills in the army should be given certificates so that these skills can be utilized subsequently; the Ministry of Defense and the Employment Service should cooperate in this respect.

(c) Much of the surplus population in agriculture will in the long-run be transferred to other sectors with the increase in employment in manufacturing and services. Besides this, the labor force in agriculture should be made more productive by programs in community development and agricultural industries.

(3) Things to be done in relation to the educational system

(a) Basic Principles

(i) While taking into account the ability of education in general to increase productivity and perform a service, priority should be given to meeting the labor force requirements - as regards number and quality - to which a development program gives rise.

(ii) Educational planning and manpower planning should be considered jointly and reforms in the educational system which this necessitates should be made.

(iii) Every level of education should be kept open to the ablest members of society and principles of selection based on competence should be applied.

(b) In accordance with the primary education law attention should be given to the following in the application of the primary school construction program :

(i) Only buildings that are going to be used should be constructed.

(ii) Ways should be sought to reduce the cost.

(iii) Consideration should be given to regional primary schools in order to bring educational services to very small communities. Efforts should be made to adjust the number, content, and location of training courses above primary school level according to need.

(c) In middle education there must be a balance between technical schools and general schools. Technical education should be given priority and efforts should be made to attract qualified personnel to this field.

In middle schools and lycées, attention should first be given to the completion of existing facilities; programs should be prepared to facilitate the entry into the labor force of graduates from these schools. It is possible to do this both during their schooling and after they have completed their schooling. Short-term training programs that can be arranged for lycée graduates might prepare them for technical fields and thus fill a large gap and also solve an important social problem.

(d) There is a great need to equip higher education so that it can meet the need especially for technical personnel. In this connection it is appropriate to use existing facilities more and better (summer courses, night courses, a longer school year) and to meet immediately the need for teachers.

(e) Technical assistance should be utilized as far as possible to provide experts to meet strategic deficiencies and to train personnel; in sending students abroad the same principle should be applied.

2. HEALTH AND SOCIAL SERVICES

a. THE PRESENT SITUATION

(1) The Situation Concerning Diseases

The ten most important diseases that are a cause of death can be listed as follows :

- Heart diseases
- Pneumonia
- Infectious diseases of babies
- Gastritis, enteritis and colitis
- Old age
- Tuberculosis
- Neoplasms
- Lesions of the blood vessels of the central nervous system
- Accidents
- Infectious diseases

This list has an important place in the establishment of health policy.

(2) The Health Facilities Situation

The total number of public and private hospitals and health centers is 578 and the number of beds in these establishments is around 47,000. Thus there are 18 beds for every 10,000 people. In 1959 in 547 public and private hospitals and health centers having 38,000 beds, 750,000 patients were hospitalized (9,300,000 days), 6,300,000 out patients were treated and 100,000 births took place . In addition, 170,000 operation were performed, 900,000 X-rays were taken, and 1,700,000 laboratory tests were performed.

(3) Health Personnel Situation

There are 12,000 Turkish doctors. 2,000 of these doctors are abroad and the number of those practicing their profession is around 7,000. The regional distribution of these doctors is as follows : in Istanbul there is one doctor for 650 people, in 15 more advanced provinces one doctor for 2,600 people, and in the other 51 provinces one doctor for 9,400 people.

The following shows the number of health personnel :

Doctors	12,418
Dentists	2,095
Pharmacists	1,345
Nurses	1,696
Midwives	2,095
Village midwives	3,264
Nurses' aides	1,420
Health officials	3,099
Village health officials	1,576

In developed countries the ratio of doctors to auxiliary health personnel is 1 to 8 - 9 . This ratio is just the reverse in Turkey, that is there are 8 - 9 doctors for each auxiliary health worker.

The lowness of the salaries paid to health personnel and the inadequacy of the schools training such workers makes the personnel problem urgent.

b. PROBLEMS

(1) Prevention of Disease

Mother and child health, tuberculosis, prevention of the death of young people, improvement of community health conditions, the campaign against regional diseases such as trachoma, leprosy, and hook worm, the completion of the campaign for the elimination of malaria, and the education of the public in health matters are topics which should be given priority.

(2) Health Facilities

There are 18 beds for every 10,000 people. The accepted norm for underdeveloped countries is 30 beds for 10,000 people. An addition of 30,000 beds is necessary to reach this norm. However, it should be mentioned here that 30 % of these beds cannot be used due to lack of personnel and appropriations.

(3) Health Personnel

Besides the unbalanced interregional distribution the percentage of unfilled slots in the preventive medical staff is around 40.

The deficiency in auxiliary health personnel due to the low pay and inadequacy of schools is the most important problem.

(4) Health Organization

Various public organizations perform different health services and this results in waste of resources.

(5) Supply System

The purchase, transport, maintenance, and repair of all kinds of medical supplies are done on a retail basis and this gives rise to waste .

(6) Social Services

The various organizations in this field work in a disorganized way without a program.

(7) The Domestic Pharmaceutical Industry

The price of domestic pharmaceuticals is cheaper than the price in foreign countries and there is excess production.

Quality control of pharmaceuticals cannot be performed satisfactorily due to lack of personnel.

(8) The Necessity of Basic Reform in Health and Social Assistance Services

Consideration of the above-mentioned problems all together shows that a basic reform in health services is necessary.

Law number 224 concerning the socialization of health services arose from this need. This law can be adjusted according to the resources that can be devoted to health services. Moreover, the public can participate in these services and additional resources can be created .

c. SUGGESTIONS AND RECOMMENDATIONS

(1) Disease Control

In connection with disease control the list given in a(1) should be kept in mind.

Moreover priority should be given to the development of preventive medicine. From this standpoint a great deal of attention should be paid to the development of community health conditions and especially to the education of the public in health matters.

(2) Health Facilities

The system of treating people by hospitalization is very expensive. Possibilities should be sought for giving greater importance to out-patient and home treatment which are cheaper. The cost per bed in small hospitals and health centers is high. For this reason small hospitals should be avoided as much as possible and optimum-sized units sought.

(3) Health Personnel

Some advantages should be recognized for personnel working in hardship regions. In order to be able to close the gap in auxiliary health personnel rapidly all possible resources should be mobilized in this direction. More schools should be opened. As regards community medicine, a new form should be given to the system of medical education.

(4) Health Organization

There should be a reorganization of the health services which various public organizations perform separately in such a way as to assure unified administration.

(5) Supply System

Regional warehouses which will give the opportunity for maintenance, repair , and assurance of all kinds of medical supplies should be promptly established.

(6) Social Services

The administration and programming of social services should be unified.

(7) The Domestic Pharmaceutical Industry

Importation should be limited to those products which cannot be manufactured in Turkey and the monopoly of domestic firms should be prevented. The Refik Saydam Hygiene Institute should be strengthened so that it can properly control the quality of pharmaceuticals.

(8) The Socialization of Health Services

In 1962 it will be useful to undertake an experiment concerning the implementation of Law 224 on the socialization of health services. Evaluation of the experience obtained in this implementation will provide an idea as to the directions in which the implementation of the law can be improved.

3. THE HOUSING SECTOR

a. THE PRESENT SITUATION

Although there are no reliable statistics, it was estimated that in 1960 there were about 4,500,000 housing units of which almost 3,000,000 were **rural** , and 1,500,000 **urban** . Because the condition of this housing and its distribution among the population is not reliably known, only the housing under construction and the needs which can be calculated have been considered here.

(1) Demand

The annual housing demand can be divided into three categories :

(a) Due to an annual population increase of over 700,000, there is a need for 150,000 housing units.

(b) Demand caused by the need to replace or renovate wornout units and those of poor standards.

(c) Demand caused by the need for more space of people living under conditions which are overcrowded by civilized standards (e.g. 4 people to a room).

(2) Supply

(a) The present supply is just enough to meet the demand caused by population increases. The gap which is created by categories (1) (b) and (1) (c) and which cannot be filled is high.

(b) Besides, the quality of the present supply is so low that it will lead to a steady increase in the demand under category (1) (b). The number of the housing units constructed with permits is around 50,000; the rest of construction is either gecekondus or village housing.

(c) The situation in villages and in cities:

(i) A solution must be found for the demand created in the villages, especially by (1) (b) and (1) (c). In this regard the problem of village housing can be solved only by a long-term program based on extensive research.

(ii) Because the demand in the cities created by population increases cannot be completely met, unauthorized construction is filling the gap.

This type of unauthorized construction creates the *gecekondu* problem. The rapid increase in the number of *gecekondus* and similar housing causes the urban demand mentioned in (1) (b) and (1) (c) to increase.

b. PROBLEMS, SUGGESTIONS AND RECOMMENDATIONS

(1) The *gecekondu* problem cannot be solved by means of prohibitions. Only removal of the causes which give rise to *gecekondus* can lead to effective results.

The measures which can be taken on this matter are of two kinds :

(i) Measures to reduce the demand for urban housing, such as reducing the flow from villages to cities and creating employment opportunities for villagers in their villages. Such steps constitute a long-term program based on extensive research and study.

(ii) Measures to increase the supply of urban housing in the form of utility housing.

(2). In order to raise the supply of urban housing so that it meets the demand without increasing the resources allocated for housing construction, it is necessary to increase the number of housing units built. This is possible by building utility housing units instead of big housing units. The average area of the 50,000 housing units now being built with permits is 90 m^2. The following measures must be taken for this purpose :

(a) Private Sector Housing

(i) The area and the cost per m^2 for the most economical housing type for Turkey must be established. It is necessary that the present ten-year tax exemption for building be recognized only for units of a size below the limit fixed; thus, without increasing the overall investment in housing, the gap in the supply can be reduced by changing the composition.

(ii) Instead of giving housing credits, economical housing units should be built directly by the relevant institutions(x) and rented or sold to the public on credit terms.

(iii) Without completely halting the extension of housing credits, the above - named institutions should take measures necessary to direct this credit to the construction of economical housing.

(iv) The Ministry of Reconstruction and Resettlement should see to it that those building their own houses with their own labor should be able to get plans, standard supplies, and **credit on easy terms,** and complete the necessary preparations (determine the type of unit, etc.).

(b) **Public** Sector - Housing Construction

(i) The housing construction in the public sector should be entirely economic housing units.

(ii) The Ministry of Resettlement and Reconstruction should coordinate the planning and construction of all the units in the public sector.

(iii) The cost of housing in the public sector should be brought down to the level of that of the private sector.

(x) These institutions are the **Estate and Loans** Bank and the Workers Insurance Association.

(3) As can be observed from the above-mentioned points, the housing need is an urgent problem; basic measures on this subject and supporting fundamental studies must be made by the Ministry concerned. Because of these deficiencies the above recommendations are not adequate to solve the housing problem. The possibilities of a revolving fund for building economical housing in the future should be considered. The Ministry of Resettlement and Reconstruction should immediately start working on preparations for a long-term housing program. Such a program should organize the construction plans, equipment, manpower, and financing of construction and define the place of housing construction in the general investment policy. To this end :

(a) Studies on local supplies must be rapidly completed and the basis for assuring the standardization of supplies must be established.

(b) In order to construct economical housing permanent associations operating with continuity and organized to build houses on a large scale must be set up.

(c) Housing units built by cooperatives must be bound by certain regulations.

(d) Those who build their houses with their own labor must be encouraged and their work must be organized, such as providing them with plans, supplies and cheap credit.

(e) Statistics relating to the housing sector must be collected.

(f) The Ministry of Resettlement and Reconstruction should immediately start research in order to solve the village housing problem within the framework of a long-range program.

(g) The Ministry of Resettlement and Reconstruction should immediately start research and studies in order to fix a long-range program concerning *gecekondus*.

LONG - RANGE REORGANIZATION MEASURES
TO BE INITIATED IN 1962

1. ADMINISTRATIVE REFORM AND REORGANIZATION

a. INTRODUCTION

The administrative reform of agencies which perform public services is one of the most significant problems in all countries, but in countries which are developing this problem acquires additional importance. Since the causes of this situation are sufficiently well known they will not be discussed here again.

The purpose of administrative reform and reorganization is to overhaul the existing administrative organizations so that they can perform their duties with speed, quality, coordination, and economy.

Thus administrative reform emerges from a need and is directed at specific objectives. From time to time this need has been strongly felt in Turkey and in this connection various efforts have been made, but these efforts were not very successful. In fact the need for reform and reorganization again became apparent with the initiation of planned development efforts. For, both in terms of preparation and implementation, planned development depends on the functioning of the government organization and related agencies in a rapid, coordinated, effective and productive manner. Therefore, this subject was emphasized in Article 13 of the " Objectives and the Strategy of the Plan " which was accepted by the High Planning Council and published in the Official Gazette of July 5, 1961.

b. PROBLEMS RELATED TO REFORM AND REORGANIZATION

The following are the chief problems calling for attention in terms of both the requirements and the goals :

(1) In what area should reform and reorganization take place ?

(2) What are the chief topics to be considered and what are the problems connected with them ?

(3) By whom or with what mechanism can such reform and reorganization be realized ?

These problems are taken up seperately below:

(1) In what areas are reform and reorganization needed ?

It can be said that improvement measures are needed in almost all areas in order to obtain better, more rapid and more productive results and to effect the development of Turkey in a balanced and continuous manner. Many of them are mentioned in the different sections of this document. However, on account of the urgency for realizing planned development on the one hand, and on the other, since it is specifically the topic of this section, the areas of reform and reorganization considered here are administrative organization and the State Economic Enterprises.

As a result of acknowledged needs, action has already been initiated in these two areas. A preliminary report on the subject of administrative organization has been prepared by the Public Administration Institute for Turkey and the Middle East and at the end of the studies a draft law was prepared and submitted to the Constituent Assembly. The discussion of this draft in the Constituent Assembly was not possible due to shortage of time. However, detailed studies were made of the State Economic Enterprises with the participation of Turkish and foreign experts. The results of these studies were published in several reports, and in addition a draft law on this subject was prepared and submitted to the Constituent Assembly. It was not possible to discuss this draft.

(2) The main topics to be taken up and problems related to these topics.

In order to realize the objectives expected from reform and reorganization, what problems and what aspects of administrative organization and of the State Enterprises should be taken up? In general it can be said that these organizations and enterprises should be studied seriously and in detail, all the problems obstructing the achievement of the desired objectives identified, and the necessary solutions indicated. However, taking up all the problems in a relatively short period of time is almost impossible due to a number of difficulties to be considered later on. Therefore, a selection must be made of the problems for which a solution will be sought.

The most important problems related to both administrative organization and to the State Economic Enterprises can be grouped into three main categories : (a) Problems related to organization and methods of work. (b) Personnel problems. (c) Financial problems. Undoubtedly, these problems are closely interrelated. However, in terms of analysis and orderly procedures, it is useful to take them up separately.

(a) Problems related to organization

The main problems related to organization can be summarized as follows :

(i) Overlapping responsibility and authority among various organizations ;

It is evident that for the state organization to function in a rapid, productive, and coordinated manner these organizations must be established and work as units supplementing each other. However, the situation in Turkey is far from this condition. Both in the general administrative organization and among the State Economic Enterprises there are many establishments in which the areas of activity are intermingled. Since many examples of this situation are given both in this document and in the reports about the State Economic Enterprises, no further examples will be given here and we shall not go into detail. This situation on the one hand creates serious coordination difficulties, and on the other hand leads to waste. One result of the irrational distribution of duties and authority is that some jobs are left without a responsible party. For this reason, general administrative organization and the State Economic Enterprises must be reviewed as whole.

(ii) The legal statuses of the departments and organizations and the offices to which they will be attached.

The main problem confronted in relation to this topic arises in terms of the State Economic Enterprises. As has been indicated in the reports mentioned above, some offices which in reality extend ordinary public services rather than performing economic activities have adopted the status of State Economic Enterprises in order to take advantage of the possibilities and the mobility they present. Parallel to this trend the State Economic Enterprises, in order to gain more privileges and become autonomous, decided to form legal bodies such as corporations, etc., which progressively get out of control.

On the other hand, preliminary studies establish the fact that both the State Economic Enterprises and the offices to which the various departments are attached do not operate rationally. For all these reasons it becomes necessary to study the various organizations both in terms of their legal status and in terms of the offices to which they will be attached.

(iii) Problems related to methods of work and to systems of procedure :

It is known that deficiencies in methods of work and in ways in which transactions are conducted give rise to unnecessary operational delays and lead to continuous complaints among the recipients of the services. For instance, the excessive centralization which leads to the concentration of everything in the hands of the highest authority in almost all offices and to all matters being resolved at that level has always been criticised but in no way corrected. In addition, unnecessary repetition and checking of transactions are often observed . All these and similar topics call for detailed organization and methods studies. As will be pointed out later on, some steps have been taken in Turkey on this subject. The extension of this activity and of organization and methods work seems necessary.

Many of the difficulties hitherto observed in connection with this matter are related to files, papers, and records. Filing and paperwork can be rapidly managed if a serious effort is made, and there are examples of this. As was pointed out before, the whole problem consists of the rapid extension of such efforts to all departments.

In this context, information - gathering, and especially keeping statistical records, should be stressed as a problem deserving special attention. For one thing, keeping records of this kind in an orderly, correct fashion and without deficiencies is necessary for preparing as well as implementing planned development. On the other hand, since records of this kind are not kept in an orderly fashion, in many instances departments and organisations are confronted with meeting the continuous information requests separately, and this naturally creates difficulties. The function of the Central Office of Statistics is to gather statistical and other relevant information, to give guidance in collection in an orderly fashion, and to assist the other departments in this respect.

The contacts made by the State Planning Organization in the course of the planning work gave the impression that this Central Office , under present conditions, is unable to perform the functions expected of it. For this reason, both in the Planning Organization and in various departments and State Economic Enterprises it is vitally necessary to take measures which will enable the interested parties to collect all the information needed for a planned economy.

(iv) Cooperation between departments and organizations and the growth of organizations:

The necessity for cooperation and coordinated work between the various departments and organizations is evident. Nevertheless, many of them, even under the most urgent conditions, either do not or cannot cooperate. This situation, of which there are various examples in the reports, leads to much harm and delay. For this reason it is necessary to consider this point carefully and seek solutions to this problem.

Another problem, which is partly the cause and partly the result of not having effective collaboration between departments, is the tendency of some departments to grow by themselves without paying any attention to other departments or to the facilities and needs of the country. This tendency toward aimless growth and self-sufficiency leads to waste in the end, both in terms of machinery and equipment and in terms of personnel. In this way, an important part of the present capacity remains idle on account of incorrect and irrational growth and new establishments. Examples of this situation can be found in the reports of the State Economic Enterprises and in various sections of this document. This topic, which is especially important in terms of planning, requires detailed analysis and rapid solution .

(b) Personnel problems :

Selection, training, placement etc.. of personnel employed in the various departments and organizations constitute a vital problem in Turkey. It is impossible to cover this important area in sufficient detail in this report. This much may be said: a central State Personnel Department has been established with the objective of considering personnel problems as a whole. It is necessary to strengthen and develop this department rapidly.

(c) Financial problems :

It is evident that this topic has several aspects. Only some of them, which seem relatively important, will be briefly considered here.

(i) Basing the budget allocations to be made to the departments on sound foundations :

The departments should make their yearly budget preparations on a program and project basis and these programs and projects should constitute the justification for the requested allocations, If this is done, it will be possible to allocate public expenditure within the framework of a plan and in a way that will yield the highest return.

(ii) Improvement of procedures and methods related to expenditures by the departments :

It is necessary to make budget controls more effective and especially to take measures which will require the expenditure of allocated funds for the project for which they were allocated.

(iii) Clarification in the budget preparation of the annual foreign exchange requirements of the public sector will be useful from the point of view of the national utilization of external resources.

(iv) Financing problems of the State Economic Enterprises :

One of the problems of the State Economic Enterprises is financing. Since these organizations, institutions, and participations are not well organized and for this reason not well run they operate at a very low rate of return. Improvement in these respects an an increase in rates of return are inescapable necessities for creating adequate funds in this sector for new investments.

It is known that many of these organizations are unable to create new funds and therefore continuously receive aid from the budget and use this aid to cover operational losses. Although the State Economic Enterprises collectively control a capital investment of approximately 50 billion liras, the net addition they can create for reinvestment is negligible. However, according to a simple calculation, if they work on a 5 % profit basis and set aside an average of 6 % for depreciation they could create annually an investment fund of at least 5.5 billion liras. Although some of the enterprises work profitably others have losses due to the price policy pursued or to bad organization. Since fluidity of funds is impossible under the present organizational system, the establishments which operate at a loss cannot complete the deficiencies in their investments and cannot make the necessary renovations; therefore, their losses continue to increase each year. Since the profitable establishments, however, utilize the funds within their own structure, they exceed the optimum size and volume of investment either by increasing their social investments each year or by choosing irrational growth; they create unused capacities in some sections and in time become establishments which in turn operate at a loss.

In general, prices are fixed for various reasons without regard for economic considerations. Therefore the enterprises operate unprofitably and an unsystematic form of subsidy is being practiced. As no advantage can be expected from the subsidies in the form in which they are now applied, it will be difficult to prevent losses on account of ingrained habits.

In order to free the State Economic Enterprises, institutions, and participations from the difficulties and defects briefly mentioned above and to enable them to measure up to the possibilities they promise in terms of the national economy, it is definitely necessary to subject them to a radical reform. From the point of view of planning, it is of vital importance to take the investments and operational activities of these enterprises on rational methods. It is impossible to discuss planning in Turkey without subjecting the State Economic Enterprises to a discipline.

In order to solve the financing problems, meet the financing requirements of each enterprise within the context of a plan, and invest the funds created by these enterprises together with the resources obtained from various sources and from the budget in conformity with short and long term plans, an investment financing fund should be created. This fund which should be established as a State Economic Enterprise attached to the administrative council should have control and supervision of all state participations and should represent the state's interest in them.

Every enterprise should be free to determine its price policy relying on purely economic considerations, and the general directors heading them should be held responsible for the success of the enterprises. In the event that in setting a price it is decided that a subsidy should be given, the financial burden of such a decision should be met from the general budget.

(f) The set-up to carry out administrative reform and reorganization.

(aa) General principles related to administrative reform and reorganization constitute an extensive, many-sided and difficult problem which calls for detailed studies. It is essential, however, to exercise meticulous care in carrying out any reforms. The following factors must be given serious consideration when an administrative reform movement is initiated in accordance with the experience acquired in Turkey and abroad and when an appropriate set-up is established to carry out the reform program.

Many of the defects observed in the administrative set-up - perhaps the most important ones - are those closely related to the social, political and economic structure of the country and to its prevalent habits, customs and values. Therefore, together with reform measures, certain policies must be considered to modify this basic structure. The desired changes in the basic structure, however, will generally take a long time. Consequently, administrative reforms must be carried out with persistence and patience, and no quick results must be expected. In fact, no country has achieved such reforms successfully in six months, or even in one or two years. Nor have reforms been realized solely through legislation.

Administrative reforms must be based on extensive and detailed studies. Superficial and haphazard observations prove inadequate in attempts to determine the sources of problems as well as in finding solutions for them.

Administrative reform should not be thought of as an activity which will begin and end at a certain time. Undoubtedly, it is useful to take up administrative problems as a whole and in a detailed fashion. It would be wrong, however, to assume that the problem will have been disposed of no later than reform activities are completed. The emergence of an assumption about extensive dismissals should be averted, and no actual dismissals should be allowed. Experience indicates that such dismissals do not yield the expected results. For the success of reform and reorganization activities, cooperation of the personnel ranks as a most important factor. Fear of dismissals strenghtens the resistance of the personnel who basically tend to resist any changes.

Administrative reform and reorganization should be placed before the public for its approval and participation. This may be achieved by airing the defects that surveys reveal and by creating a public forum for the discussion of the contemplated measures and solutions.

Like the administrative organization itself, reform and reorganization activities must be kept outside of political interference. If political purposes become apparent (or even if they are so much as sensed by the public) reform activities will find it difficult to receive the support of the public and administrative personnel alike.

(bb) The set-up to carry out administrative reforms .

Having reviewed the foregoing factors, we must dwell upon how and by what set-up reform and reorganization may be effected.

The administrative reform commission :

It is customary in many countries to form special committees to survey the problem of administrative reform and reorganization as a whole and to conduct or instigate the necessary studies. Such an agency would also be useful for Turkey. Indeed, as mentioned earlier, after preliminary studies a draft law prepared for the establishment of such a commission was submitted to the Constituent Assembly.

The commission may be established as an organ attached directly to the legislative or executive body, e.g. Prime Minister or the deputy prime minister. To perform its functions effectively the commission should be given adequate authority and sufficient time so that its work will not be rushed. The commission must organize a large and competent bureau of researchers. The bureau may be strengthened by foreign experts, if necessary. Utmost care must be exercised in the selection of personnel to be recruited from government agencies and departments to work within the commission or under its auspices. Experience shows that governmental departments and agencies encounter great difficulties when a reform progres is launched by their own representatives.

Besides establishing a reform commission, some other measures of similar intent and usefulness must also be taken into consideration. Among them the following two deserve special mention :

1) Permanent orgnizations for administrative reforms :

Besides creating administrative reform commissions, which have a temporary character and which represent a more or less extraordinary measure, many countries establish permanent organizations which survey administrative problems on a constant basis and recommend appropriate measures for improvement. Turkey, too, has taken strides in this sphere. Among them, the State Personnel Department, State Planning Organization and the Public Administration Institute for Turkey and the Middle East deserve particular mention. For the solution of administrative problems, it is essential to make utmost use of these organizations and to develop and reenforce them on a continued basis.

2) Appointment of qualified administrators to key positions :

Another major factor of a successful program of administrative reform and reorganization is the attributes and qualifications of high-level administrators in key positions. If well-qualified administrators are appointed to top posts, not only will routine work proceed efficiently but the reform program will acquire a permanent character. However, it is vitally important that once appointed to key positions, competent executives should be permitted to function without unnecessary interferences and certainly without frequent transfers or reappointments.

2. THE REORGANIZATION OF LOCAL SERVICES IN A COMMUNITY DEVELOPMENT PROGRAM

(VILLAGE DEVELOPMENT)

a. THE PRESENT SITUATION

(1) Many departments within Turkey's state administration perform functions related to services designed for local communities. Among them are education, publications, encouragement of local activities and efforts to modify the community structure. The principal organizations in charge of such functions are the Directorates of Agriculture, Veterinary Services, Land and Irrigation, Agricultural Disease Control, and the Agricultural Tools Organization, and various organizations within them (Agricultural Schools, 4-H clubs, etc.) Other agencies are the Directorates of Elementary Education, Public Education, Technical Education and their various subdivisions; the Association of Cooperatives and the Department of Cooperatives at the Ministry of Commerce, Handicraft Industries Department at the Ministry of Industry, Directorate of Cooperatives at the Agricultural Bank, Directorate General of the Institute of Social Services at the Ministry of Health and Welfare, State Hydraulic Works, Directorate General of Land and Settlement of the Ministry of Reconstruction and Settlement.

All these organizations operate with similar aims or in similar areas. Their operations have three main characteristics: 1) The Departments concerned act on the basis of diverse principles and assumptions and often without an wxchange of information about their respective acfivities. (This may occur among the directorates within a ministry, or even between the departments of the same directorate .) 2) No efforts are made for a systematic evaluation of the experiments conducted and the results obtained. 3) Attempts to obtain public participation in community services and encouragement for common action are infrequent and scattered. Consequently, extensive resources and qualified manpower are used unproductively, thereby curbing the social advantages and financial benefits which would result from public participation in such services. It is essential, therefore, to overhaul and reorganize the public services. The most constructive approach in this sphere would be to consider the problem within the context of community development.

b. THE NATURE OF COMMUNITY DEVELOPMENT

1) Services extended to communities in terms of a community development program must be reorganised on the basis of the following principles :

a) To increase efficiency and productivity by providing for individual action by every agency and organization and coordinated activity among all organizations concerned on the basis of specific principles and goals.

b) To use the community programs as a means of development which will remould social structure and modify human attitudes and modes of behavior on the basis of the data to be obtained about the structures of local communities and the changes that may be effected in them.

c) To encourage the people to participate in these programs on a voluntary basis, thus providing for better and less expensive maintenance of services and creating a sense or habit of common action.

d) To take measures in the context of these programs in order to mobilize the idle labor force.

2) Community development is a sociological technique related to the systematic organization of the influence to be exerted on a community in order to obtain definite results, which will be subject to evaluation. This poses 4 main problems :

1) Determining the goal of the influence to be exerted on the community in a precise and measurable way. 2) Survey of the community structure and the selection of the variables to be used in effecting a change. 3) Definition and organization of the means and services which will exert influences on the community. (4) Evaluation of results by way of assessments in various stages.

3) Accomplishments in the field to the present :

Although no systematic community development program has been effected in Turkey, some activities have taken place which can form the basis of such a program. Salient among them is the village institute experiment which continues after substantial changes. The Ministries of Education and Agriculture run schools where courses are given which will contribute to improvements in village life. The Ministry of Industry also conducts certain courses, and the Ministry of Agriculture offers extension programs. The Directorate General of Public Education at the Ministry of Education conducts educational programs outside schools. In this context, we should also mention the activities of the experts of international organizations and a regional pilot project experiment on community development. However, these activities have not been organized in a systematic fashion. Only certain aspects of the problem are taken up, and in many instances no attempt is made to evaluate the results obtained.

Past and present activities in this field - particularly extension activities - have been studied by the State Planning Organization. Preparations are under way to organize the work to be done in this field in the future.

4) Things to be done in this field :

a) Without waiting for the completion of long-term studies, an interdepartmental and inter-organizational committee should be formed with the purpose of determining the basis of a coordination that can be set up as soon as possible .

b) Various govenmental departments should be called upon to study their regional services, the goals and principles of such services and the results obtained from them.

c) Reseach done at the State Planning Organization should be supplemented by pilot projects. The first of these experiments may conceivably be conducted in 1962 within the framework of the Antalya Regional Development Project.

d) A detailed questionnaire is being prepared on this topic at the State Planning Organization. Preliminary work on it will be completed by February 1962. Collection of the questionnaires and evaluation of results will come to an end in September 1962. Sample villages will be selected thereafter for the pilot study, and experiments will be started. In March 1962, a comprehensive development program will be proposed based upon the results of the surveys and applied research on this topic.

3. REFORM IN THE TAXATION SYSTEM

The Tax Reform Commission establishmed at the Ministry of Finance is continuing its work. The State Planning Organization prefers to wait for the results of the Commission's work. The following, therefore, are the main principles which should form the basis of the intended reforms :

a. As part of the tax reform surveys, the taxation system should be studied as a whole and recommendations made within this general context.

b. Turkey's taxation system should be set up in such a way as to create the general economic effect of increasing total investments and assure the flow of investments into the desired areas.

c. In the improvements to be effected in taxes for the purpose of attaining certain economic goals, it is necessary to abide by the principles of social justice as much as possible and to select the most suitable one among various alternatives.

d. The adoption of the objective of economic development has charged the government with many additional responsibilities. Therefore, state revenues must increase and an elasticity must be maintained in Turkey's taxation system so that state revenues will closely follow any increments of national income.

e. In order to lessen the rather heavy burden of local authorities on the general budget, their sources of revenue must be developed and improved.

4. DEVELOPMENT OF THE CAPITAL MARKET

Investment to be made in the forthcoming planned period will show an important rise in terms of its amount and its ratio to the gross national product. It is impossible to meet the entire increase by means of savings. Therefore, it becomes vitally important to expand private saving in order to attain the desired rate of economic growth.

The tendency of private savings to increase is an encouraging development in Turkey. However, a substantial part of these savings has flowed into the money market. Although basically related to established habits and to liquidity, it is no doubt also related to the fact that a capital market failed to develop in Turkey. Therefore, Turkish banks concerned with the financing of investments should assist the establishment of a capital market. A detailed survey should be made on this topic including the views of the banks.

a. Above all, security and stability must be maintained for private savings to increase. A clear and consistent economic policy is a prime requisite for security and stability.

b. In order for the capital market to develop, certain savings and investment institutions must be established which will operate within its context. Institutions with convertible capital which can easily take on new shareholders and issue shares have not been established so far partly because of the stringent provisions set by the Commerce Law and partly because of red tape. However, investment trusts (especially those constantly open to new shareholders), investment banks and savings associations are the principal institutions operating within the capital market. The establishment of such institutions should be encouraged and the formalities relating to their formation should be simplified.

c. The basic means of operation on the capital market are stocks and shares, obligations and other securities which can always be purchased and sold and can circulate freely.Their issuance is subject to cumbersome formalities set by the Commerce Law. Tax laws levy rather high tax obligations on the issuance and circulation of stocks and shares. In view of the revenue they secure for the budget, abolition of these taxes would entail no loss and could be effected with no difficulty. Issuance formalities must be streamlined and simplified.

d. Securities in the form of shares show a great variety in countries which have well-developed stocks-and-capital markets. The available variety meets the needs of diverse income groups.

Turkey's Commercial Law has rendered it impossible to issue some types of notes and has established strict and ponderous formalities for the issuance and circulation of other types . Credit procedures and banking regulations also exert influences which hinder the development of some essential elements of the capital market. For this reason, the banking system must be reviewed with an eye to modifying the regulations and simplifying and streamlining the formalities for smooth operations.

e. The encouragement of small savings depends on finding attractive and easy investment fields for them. On the one hand, the establishment of the basic and normally functioning institutions of a capital market should be encouraged. Steps should be taken, on the other hand, to enable the institutions and the individuals, who choose ,to enter into transactions with them, to issue , purchase and circulate securities and stocks of all types without encountering any obstacles or incurring undue obligations. Only in this manner can the situation be established where the owner of capital and the entrepreneur are different individuals, and this is imperative for the establishment of the capital market.